

Mississippi Headwaters Tallgrass Prairie Ecosystem



USFWS photo

A major threat to the ecosystem is the continued loss and fragmentation of grassland, wetland and native woodland habitats...

Ecosystem Description and Team Mission

The Mississippi Headwaters/Tallgrass Prairie Ecosystem includes the majority of Minnesota and portions of Wisconsin and Iowa. The Ecosystem is one of transition from Prairie Parkland, to Eastern Broadleaf Forest, and then to Laurentian Mixed Forest. Land uses and conditions range from northern forests dominated by tourism and timber industries, to vast areas of intensively used agricultural lands, typically containing severely fragmented and degraded remnants of the tallgrass prairie.

A major threat to the Ecosystem is the continued loss and fragmentation of grassland, wetland and native woodland habitats for conversion to agricultural and other land uses. Degradation of remaining wetlands, lakes, and rivers due to runoff from agricultural lands and other non-point or point source discharges is also a concern. Timber harvesting, mineral extraction, and increasing pressures from recreational uses create conflicts with wildlife habitat in the northern reaches of the Ecosystem.

Many of the mandated roles of the Service must take into consideration areas important to the states' economies. Agriculture provides a livelihood for one in four Minnesotans and the state ranks 7th in agricultural exports worth \$2.4 billion. Minnesota's forested areas not only provide important wildlife habitat, and stabilize soils but also support a \$7.8 billion forest products industry. Needs of citizens from rural, agricultural and forested areas of this ecosystem differ greatly from those of the Twin Cities, a major metropolitan area that is home to 2.2 million people.

This Ecosystem supports over 121 species of neotropical and other migratory birds. It constitutes a key component of the Prairie Pothole Region which produces 20 percent of the continental population of waterfowl. The Ecosystem supports several species of candidate and federally-listed threatened and endangered species including plants, mammals, birds, and mussels. No group of animals in the Midwest is in such grave danger of extinction as mussels. The four major watersheds of the Ecosystem (Mississippi, Minnesota, St. Croix, and Red rivers) are important habitats for these mussels and several species of interjurisdictional fishes such as the paddlefish and lake sturgeon.

The work of the Service to meet the wide range of needs within this varied landscape is conducted by 18 field offices within the Ecosystem. Offices include 10 national wildlife refuges, five wetland management district offices, two realty offices, and one Ecological Services, law enforcement, and private lands office.

Summary of Fiscal Year 1998 Accomplishments

The Headwaters team takes great pride in its many on-the-ground accomplishments over the past year. The emphasis on habitat as a means to manage trust responsibilities of the Service and Region 3 Fish and Wildlife Resource Priorities of Concern is evident in restorations, preservation, and management of wetland and upland habitats in Fiscal Year 1998. None of these accomplishments would be possible without coordination and the cooperation of our many partners. Informing the public of the accomplishments in the ecosystem is also stressed by the Team.

Restoration of upland habitat included 4,198 acres on and 2,764 acres off of refuge lands. - Ecosystem Team Accomplishment

Restorations of habitat in uplands and wetlands were a major accomplishment of the team. Restoration of upland habitat included 4,198 acres on and 2,764 acres off of refuge lands. This represents 41 and 50 percent respectively of these categories in Region 3. Coordination activities by the Refuges and Wildlife Stations were essential to accomplish these restorations. Interagency coordination was involved with nearly 4 million acres of Headwaters habitat or 58 percent of the Region 3 total in Fiscal Year 1998. Nearly all acres affected by tribal coordination in Fiscal Year 1998 in the Region were within the boundaries of the Headwaters Ecosystem.

Management practices such as water level and fire management, and pest plant control for federal and private lands are additional measures the Team has taken to benefit fish and wildlife. The Headwaters Ecosystem Team is a Regional leader in use of fire. All of the 5,558 acres of habitat burned off-refuges in Region 3 were within this ecosystem. In addition 80 percent of the habitat (46,329 acres) burned under prescription on refuge lands was within the Headwaters. Expanding populations of pest plants is a growing problem in the Region. The Headwaters stations are focusing on a variety of control techniques to halt this deterioration of habitat. Over 6,300 acres were treated with chemicals, 5,700 acres were mechanically treated and 665 acres had biological control techniques applied. This equates to 50, 78, and 73 percent respectively of Region 3 totals for these categories.

Summary of Fiscal Year 1998 Accomplishments (continued)

***...an informed public
is a keystone to gain
citizen support...***

Fisheries efforts in the Ecosystem focused on the St Croix River Task Force with a goal of slowing the spread of the zebra mussel and reducing harmful impacts. The Service monitors the spread and contributes to the Task Force management decisions. A cooperative effort with the White Earth Biology Department and Minnesota Department of Natural Resources provided a management plan for the lake sturgeon, with a focus on reintroduction and habitat and population monitoring. Cross program work included fishery surveys on Big Stone, Tamarac, and Minnesota Valley National Wildlife Refuges; Rydell NWR reared 11,000 fingerling walleye and stocked them into Service trust waters.

The Twin Cities Field Office also participates on the St Croix River Task Force related to concerns for two federally listed endangered mussels (winged mapleleaf and Higgins' eye) and planning management of the Lower River over the next 20 years; results will be used by the National Park Service in development of a new General Management Plan. The Task Force includes over 200 members including a wide variety of interests. Cross program initiatives included a study of contaminants (metal accumulations) and their impacts on birds on Agassiz NWR, site contamination of the Round Lake Unit of Minnesota Valley NWR from a munitions plant, and response to a spill of ethylene glycol into a storm water drainage system resulting in a major fish kill at Minnesota Valley NWR. Population and habitat viability analysis workshops were held for the endangered winged mapleleaf and the goblin fern. The results of the workshops will be a final report on current information on each species and current thinking on problems and recommendations to preserve and recover the mussel and to protect and maintain the fern. A small prairie butterfly, the Dakota skipper was the subject of a petition to list under the Endangered Species Act. Pre-listing conservation was suggested to prevent listing of the species. The Service is working with state natural resource agencies and academic species experts to develop a plan to manage populations on the Big Stone NWR and identify tracts for future acquisition for the Northern Tallgrass Prairie Habitat Preservation Area.

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Goals for Fiscal Year 1999

- Provide support to the U.S. Geological Survey (Water Resources and Biological Resources Division) to begin the 4 year study "Relations of Runoff Processes to Wetlands and Land Uses Within Various Landscapes of the Red River of the North Basin". The study will provide tools to monitor or project runoff into basins under various land uses within the sub - basin and have application throughout the ecosystem. (Priority 1)
- Focus on native tallgrass prairie in that portion of the Habitat Preservation Area within the boundaries of the Minnesota River Basin. At least 950 acres will be preserved via acquisition or easements and 1400 acres restored by seeding to native prairie. (Priority 2)
- A focus group of knowledgeable representatives from the Service, The Nature Conservancy and other partners will establish criteria for the use of seed from harvestable sources for tallgrass prairie restoration within the Ecosystem. Field stations will identify harvestable sources of native seeds, Ascertainment in the Regional Office will develop eco-type maps of the tallgrass prairie in the Headwaters ecosystem based on criteria identified by the focus group and location of sites as identified by project leaders. (Priority 3)
- The Team will raise the profile of the Headwaters team internally by submitting at least one article to *Fish and Wildlife News* or *People, Land and Water*, briefing the Regional Director on native prairie and the seed bank issue, and by team members regularly reporting ecosystem accomplishments to the team leader for the Monday morning staff meeting. We will use the External Affairs staff to heighten our image with the public and our partners via an article in the news media on a significant ecosystem team accomplishment. (Priority 4)

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- Ecosystem Team Goal
Fiscal Year 1999***

Fiscal Year 1998 Accomplishments

Refuge Display Part of 12th Annual Winona Wildlife Art Expo

Upper Mississippi River National Wildlife and Fish Refuge

A three-day art festival and sale attracted dozens of wildlife artists from Minnesota, Wisconsin, and Iowa to Winona, Minnesota.. A display was set up and staffed by refuge staff and volunteers from Friends of the Upper Mississippi River Refuges. Approximately 450 people stopped by the display during the course of the weekend and almost 100 membership applications for the Friends were handed out to interested persons. **10/97**

Operation Outback Results in Convictions, Fines, and Community Service

St. Paul Law Enforcement Office

In January 1996, Service Law Enforcement agents learned that reptiles in Australia were being poached by two men from the Twin Cities area. In a separate, concurrent investigation, a U.S. Customs' dog alerted on a package containing live reptiles from Australia. at the Federal Express hub in Memphis, Tennessee. Cooperative efforts between the agencies revealed four men, two in Minnesota and two in Florida, were involved in the smuggling operation. Investigators determined that over a three year period, the suspects were going to Australia and smuggling back protected and endangered species, including geckos, lizards, black headed pythons, and skunks valued at over \$170,000. Court proceedings resulted with the four defendants receiving a total of 23 months in prison; 10 years probation; \$22,800 in fines and 250 hours of community service. **10/97**

Refuge Reaches Out to 11 Wisconsin Schools

Upper Mississippi River National Wildlife and Fish Refuge

Programs about the Refuge were presented during National Wildlife Refuge Week to 1,290 students at eleven schools in Holmen, Onalaska, LaCrosse, and Stoddard, Wisconsin and one Cub Scout pack of 10. Staff also set-up a display at the Minnesota Department of Transportation Information Area at Dresbach and talked to over

300 travelers in a four hour period. A seminar regarding projects occurring on the Refuge was presented at the Visitor Center by the District Manager to nearly 30 participants. **10/97**

District Staff Presents Tallgrass Prairie Preserve to Moorehead Audubon Society

Morris Wetland Management District

Staff from Morris Wetland Management District gave a presentation to a local chapter of the Audubon Society in Moorehead, Minnesota. Objectives of the North American Tallgrass Prairie Habitat Preservation Area were explained and the draft Environmental Impact Statement discussed. They also spoke on native prairie, its management and associated plants and wildlife. Approximately 40 people attended. **10/97**

Waterfowl Numbers Peak - 5,000 Ringnecks, 16,000 Mallards

Rice Lake National Wildlife Refuge

Fall migration duck numbers at Rice Lake National Wildlife Refuge peaked at 45,000 ring-necked ducks and 16,000 mallards during October and early November. **10/97**

Region 3 Hydro-Axe Used to Manage Refuge Habitat

Rice Lake National Wildlife Refuge

Region 3 hydro-axe was used to mow over brush and young trees on 49 acres on Rice Lake National Wildlife Refuge to provide improved habitat for songbirds, woodcock, and resident wildlife species. Cutting brush and young trees with the hydro-axe is used with prescribed burning and rotational haying to maintain large blocks of early successional habitat for songbirds and resident wildlife. These management techniques are also used to maintain roosting, feeding, and nesting habitat and singing sites for American Woodcock. **10/97**

Ojibwe Harvest Wild Rice at Rice Lake Refuge

Rice Lake National Wildlife Refuge

Ojibwe Indians harvested 23,000 pounds of wild rice from Rice Lake using traditional harvest methods. The Refuge provides access to Rice Lake and a local Indian ricing committee oversees the rice harvest. **10/97**

Rice Lake Refuge Designated 'Globally Important Bird Area'

Rice Lake National Wildlife Refuge

Rice Lake within Rice Lake National Wildlife Refuge was designated a Globally Important Bird Area under the American Bird Conservancy's Important Bird Area program. The lake supports concentrations of up to 100,000 waterfowl including as many as 70,000 ring-necked ducks during the fall migration. **10/97**

Rice Lake Refuge Participates in Greenshores Project

Rice Lake National Wildlife Refuge

Rice Lake Refuge is working cooperatively with the Aitkin County Soil and Water Conservation District through the Partners for Wildlife program to restore wildlife habitat and reduce erosion and pollution in riparian and shoreland areas. Cattle producers are provided with fencing to exclude cattle from shoreland and from a buffer strip of upland habitat adjacent to the lakeshore. Cattle producers are also provided cow-powered pasture pumps which provide a water source away from the shoreland so cattle won't wade into lakes and streams to drink. Landowners install the fencing and pasture pumps and agree to monitor the fence and pump for 10 years. In September, miles of shoreline and five acres of upland habitat were fenced and two pasture pumps were installed on two farms in Aitkin County. **10/97**

Litchfield Districts Assists Minnesota DNR With Predator Scent Post Surveys

Litchfield Wetland Management District

The Litchfield Wetland Management District recently completed the 1997 Fall Predator Scent Post Surveys, the 14th season of assisting the Minnesota Department of Natural Resources with this statewide annual survey. The data collected provides valuable information on the rise, fall and range changes of mammalian predators and other species. This year, staff and volunteers ran eleven, ten-station routes in Meeker and Kandiyohi Counties. Stations are constructed roadside at one-third mile intervals and consist of a one-meter diameter pad of soft, moist sand with a scent disc placed in the middle. Any tracks found the next day are identified by route personnel using track keys. In 1997, more than a dozen species left tracks on the District's stations. **10/97**

Wetland District Manager Interview Airs on Statewide Radio Program

St. Croix Wetland Management District

Wetland District Manager Steve Delehanty was the guest on a popular Wisconsin Public Radio talk show. The show featured discussion about the refuge system nationwide and particularly about Wisconsin's refuges. Listeners also called to ask questions about refuges and the refuge system. **10/97**

Tamarac National Wildlife Refuge Fall Open House and Craft Show

Tamarac National Wildlife Refuge

Unusually warm temperatures and lingering leaf color no doubt contributed to Tamarac National Wildlife Refuge's super-successful fall open house and craft show, held to kick-off National Wildlife Refuge Week. Nearly 700 visitors attended the event on Saturday, October 4, 1997, which featured talks, demonstrations, hand-made craft items, food, and free refuge week posters and bookmarks. **10/97**

Record Harvest Nets Close to 30,000 Pounds of Native Prairie Grass

Detroit Lakes Wetland Management District

A total of 27,700 pounds of native prairie grasses and forb seeds was harvested on six Waterfowl Production Areas (WPA) in the Detroit Lakes Wetland Management District during September 1997. The seed was harvested on WPAs that had harvestable stands of prairie grasses and forbs on them. The seed was dried and cleaned in the cleaning facility located at the Headquarters complex of the Detroit Lakes Wetland Management District. The retail cost of native prairie seed ranges from \$12 to \$36 per pound depending upon the diversity of grass and forb species that are present. The seed has a good mixture of grass and forb species so the retail value of the processed seed is estimated to be \$583,100. This seed will be used to restore 1,400 acres of crop land on the Detroit Lakes Wetland Management District, Hamden Slough National Wildlife Refuge, and White Earth Tribal Lands into nesting habitat for migratory waterfowl and other ground-nesting birds. **10/97**

Ojibwe Drum Ceremony Held at Rice Lake National Wildlife Refuge Sacred Sites

Rice Lake National Wildlife Refuge

Over 100 people attended an Ojibwe drum ceremony at Rice Lake National Wildlife Refuge. The drum ceremony was conducted at a sacred site in the Refuge pursuant to Executive Order 13007. **10/97**

Adopt-A-Highway Cleanup by Staff at Litchfield Wetland Management District

Litchfield Wetland Management District

On October 16, 1997, the staff of the Litchfield Wetland Management District once again donned their orange vests and set out to clean-up a two-mile portion of Highway 12 in Meeker County. This was the second time this year and the office has participated in this program since 1995. The State of Minnesota has erected a sign in this two-mile area acknowledging this office's participation. **10/97**

Northern Tallgrass Prairie Habitat Preservation Area Open House

Morris Wetland Management District

On October 8, 1997, Judy West, Tom Larson, and Howard Lipke from the Service's regional office and Alfred Radtke and Bernard Angus from Morris Wetland Management District, held an Open House for comments on the draft Environmental Impact Statement for the Northern Tallgrass Prairie Habitat Preservation Area. The Open House was held at the Morris Wetland Management District office. Ten people attended and a local radio and television station covered the event. **10/97**

Common Tern Nesting Successful at Mille Lacs Refuge

Rice Lake National Wildlife Refuge

A project to improve nesting success of common terns at Mille Lacs National Wildlife Refuge resulted in 52 terns fledged from the tern nesting colony of Hennepin Island. A string grid is constructed over one end of Hennepin Island to exclude ring-billed gulls from the tern nesting area. Ring-billed gulls compete with common terns for nesting sites and gulls are also predators of tern chicks. Refuge staff construct the nesting grid and Refuge and Mille Lacs Band biologists monitor nesting activity throughout the summer. **10/97**

Population and Viability Analysis Held for Rare Goblin Fern

Twin Cities Field Office

The Twin Cities Field Office served on the steering committee and participated in a U.S. Forest Service - sponsored population and habitat viability analysis workshop for *Botrichium mormo*, goblin fern. The viability analysis was conducted by the Conservation Breeding Specialist Group, Apple Valley, Minnesota. Participants included state, tribal, and federal conservation agency personnel; academic experts, and interested citizens. The final report will contain current information on the species and current thinking on problems and actions to protect and maintain the species. **10/97**

Service Continues Role in St. Croix Zebra Mussel Program

Twin Cities Field Office

The Twin Cities Field Office and the LaCrosse Fishery Resources Office participated in the multi agency state-federal zebra mussel response team that organized and conducted a search for zebra mussels in the draw down flowage of a hydro dam on the St. Croix River. The power company cooperated by drawing down the reservoir after zebra mussels were reported on a zebra mussel sampler in the flowage. Zebra mussels are of particular concern in the St. Croix in part because the river hosts two federally endangered mussels (winged mapleleaf and Higgins' eye) plus Minnesota and Wisconsin listed mussels. State and federal agencies have cooperated for several years in an effort, successful to date, to keep zebra mussels from spreading up the St. Croix. To the relief of all, no zebra mussels were found in the draw down search. **10/97**

Three Native Seed Drills Purchased for Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

With funding from Ducks Unlimited and the Prairie Pothole Joint Venture, three Truax native grass and forb seed drills were purchased for the Detroit Lakes Wetland Management District. The drills will be used to establish native grass and forbs on about 500 acres of uplands on District Waterfowl Production Areas each year. These areas will annually provide habitat for about 9 broods of ducks and numerous other wildlife species. The Waterfowl Production Areas will also provide opportunities such as hunting, trapping, wildlife observation, and other recreational activities for numerous people to enjoy.

11/97

Youths Hunt Deer on Rydell National Wildlife Refuge

Detroit Lakes Wetland Management District

On the weekends of November 8-9 and 15-16, 1997, 14 youth hunters, ages 12-15, and their mentors participated in the youth deer hunt on the Rydell National Wildlife Refuge. The young hunters and mentors had recently completed more than 14 hours of hands-on training that focused on developing deer hunting skills and responsible hunting behavior. By the end of the two weekends, six of the 14 hunters had bagged a deer. **11/97**

91,000 Pounds of Native Seed Cleaned at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

More than 91,000 pounds of native grass and forb seed were cleaned and processed by personnel at the seed cleaning facility at the Detroit Lakes Wetland Management District. The seed, valued at more than \$819,000, was harvested last fall from native prairie grassland sites throughout western and central Minnesota by five Wetland Management Districts, three National Wildlife Refuges, four MN Department of Natural Resources stations, and the White Earth Tribe. The seed will be used to restore 5,600 acres of old crop land into upland nesting habitat for migratory and resident ground nesting birds. An estimated 613 ducks will be produced in this habitat annually and numerous other migratory and resident wildlife species will also benefit. **11/97**

Litchfield District Point Count Summary

Litchfield Wetland Management District

Point count surveys have been conducted in June on Waterfowl Production Areas in prairie and seeded grassland habitats from 1994 through 1997. 375 surveys were completed on 135 points on 16 WPAs in northwestern Kandiyohi county by experienced local birders. 108 bird species were heard or seen and documented from the points and many other species were observed in nearby habitats. Woodland species were more prevalent than expected, probably due to fragmentation and degradation (tree and brush invasion) of grassland habitat. Some rare species (Cerulean warbler, Henslow's sparrow) and species considered out of their range (Veery, Olive-sided flycatcher, Ovenbird, Red-bellied Woodpecker) were seen. **11/97**

250-Acre Wetland Restored

Wisconsin Private Lands Office

Wisconsin Private Lands Office, through the Partners for Wildlife Program, provided survey and design for two water control structures and two ditch plugs to restore 250 acres of flood plain and riparian wetlands on Wisconsin Department of Natural Resources property in south central Wisconsin. Called the "Dead River Project," the area hosts a large cut-off stream meander in the center of the restored wetland complex. The project's cost of \$7,900 was funded by Ducks Unlimited. **11/97**

91,000 Pounds of Prairie Seed Cleaned at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

More than 91,000 pounds of native grass and forb seed from five Wetland Management Districts, two national wildlife refuges, and four Minnesota Department of Natural Resources stations were cleaned at the Detroit Lakes Wetland Management District's seed cleaning facility during the fall of 1997. This seed, which has an estimated retail value of \$819,000, will be used to establish 5,600 acres of native prairie habitat for nesting waterfowl and other wildlife on federal waterfowl production areas, national wildlife refuges, state wildlife management areas, and White Earth Tribal lands. **11/97**

Rare Birds Sighted in Litchfield District

Litchfield Wetland Management District

During the last few years, many rare or locally uncommon birds, some state or federal listed species, have been spotted in the District by staff and by local birders. Some of these have been seen during June point count surveys conducted in Waterfowl Production Area grassland habitats from 1994 through 1997. Most are incidental sightings. Listed species sighted include the American white pelican, Trumpeter swan, Bald eagle, Peregrine falcon, Red-shouldered hawk, Marbled godwit, Franklin's gull, Common, Forster's and Black terns, Short-eared owl, Loggerhead shrike, Cerulean warbler and Henslow's sparrow. Other locally uncommon species seen include the Western grebe, Harlequin duck, Sandhill crane, American avocet, Boreal owls and Yellow-throated warbler. **11/97**

Fergus Falls Wetland Management District Undergoes Aviation Safety Review

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District along with the Habitat and Population Evaluation Team Office underwent an aircraft operations review on November 19, 1997. The review included not only the safety of station aircraft operations but suggestions to make aircraft operations more user friendly. Suggestions included making more local aviation operations available to field stations whose needs all come at the same time and for the same operator. Result of the review will be coming to the offices reviewed. **11/97**

Fourteen Youths Hunt Deer on Rydell National Wildlife Refuge

Detroit Lakes Wetland Management District

On the weekend of November 8-9 and 15-16, 1997, 14 hunters, ages 12 to 15, and their mentors participated in the youth deer hunt on the Rydell National Wildlife Refuge. The young hunters and mentors had recently completed more than 14 hours of "hand on" training that focused on developing deer hunting skills and responsible hunting behavior. Each hunter was accompanied by a mentor during the training and into the field during the hunt. The mentors were parents, grandparents, firearms safety instructors, and other volunteers who donated their time and hunting expertise to help the young hunters have a good, quality, educational, and enjoyable hunting experience. The mentors were not allowed to hunt. Instead, they provided guidance to their youth hunters. The young hunters had the opportunity to hunt deer on the Refuge during one of the November weekends and each hunter could harvest one deer. Unfavorable weather and fewer deer on the Refuge, made seeing and bagging deer somewhat more difficult than during the youth hunt of 1996. By the end of the two weekends, 6 of the 14 hunters had bagged a deer, for a success rate of 43 percent. **11/97**

Nineteen people with disabilities participated in a special deer hunt on the Rydell National Wildlife Refuge...

25 Wood Duck Boxes Installed on Refuge

Hamden Slough National Wildlife Refuge

An Eagle Scout service project was approved to install 25 biologically controlled wood duck boxes. A tree swallow nesting box was attached to the wood duck box to reduce nest competition and stress on the wood ducks from other cavity nesting birds, particularly starlings. The tree swallows will allow the female wood duck to have her cavity, but will keep all other birds away from both nests. **11/97**

North American Waterfowl Management Plan's Outreach Project Report Available

Joint Venture Office

In 1996, the International Association of Fish and Wildlife Agencies was provided a federal grant to initiate an outreach effort to expand North American Waterfowl Management Plan partnerships. Conducted by D.J. Case & Associates, the study involved nationwide market research, and selected two joint ventures as test sites for the initiative. The final report and handbook are now available, entitled "Expanding the Reach and Resources of the North American Waterfowl Management Plan." The report cites outreach planning and action items for the Upper Mississippi River/ Great Lakes Region and Prairie Pothole Joint Ventures, which will assist in expanding partnerships and dollars to meet the objectives of the North American Waterfowl Management Plan. **11/97**

80 Acres Added to Red Cedar Waterfowl Production Area

St. Croix Wetland Management District

A landowner accepted an offer to sell 80 acres to the Service to expand the Red Cedar Waterfowl Production Area in Dunn County, Wisconsin. **11/97**

First 15 Wetlands in North Star 2000 Completed

Hamden Slough National Wildlife Refuge

The first 15 wetlands of 225 to be restored were completed in the North Star complex of federal, state, and private land. Total wetland restoration costs are estimated at \$225,000. Upland restorations have also begun and will cost approximately \$250,000 if wild flowers are included. **11/97**

Longstanding Easement Case Heating Up Again in Mahnomen County, Minnesota

Detroit Lakes Wetland Management District

Five years after 127 wetlands were restored on an easement, the easement holder is claiming the Service over-restored the wetlands, causing excessive water to be impounded in the wetlands. In 1994, the easement holder filed a claim against the Service for trespass, nuisance, breach of contract, inverse condemnation, and violation of the order for restoration. In March 1995, after a motion by the U.S. Attorney to dismiss the action, the easement holder agreed to dismiss all of the charges, and instead, filed a tort claim for \$200,000 against the Service for trespass and creating a nuisance. The claim was denied by the Service because the easement holder had not filed the claim in a timely manner and it was determined that the Service had restored the wetlands appropriately. The case was appealed to the 6th District Court. This court ruled in favor of the Service. In March 1997, the case was appealed to the 8th Circuit Court. This court overruled the District Court and has instructed the lower court to determine if the water that was impounded in the wetlands has caused a nuisance or has trespassed on the property. The case is now in the discovery stage and is expected to come to trial in the near future. **11/97**

People with Disabilities Hunt Deer on Rydell National Wildlife Refuge

Detroit Lakes Wetland Management District

Nineteen people with disabilities participated in a special deer hunt on the Rydell National Wildlife Refuge during the weekend of October 17-19, 1997. The hunt was sponsored through a partnership with Options Resource Center for Independent Living, Minnesota Department of Natural Resources, Detroit Lakes Wetland Management District and several volunteers. Favorable weather and an opportunity to see deer and other wildlife provided an enjoyable weekend for all participants in the hunt. A total of seven deer were harvested. **11/97**

Partners Receive \$912,000 Grant to Restore Wetlands, Enhance Upland Acres

St. Croix Wetland Management District

Service partners pledged to contribute \$1.8 million in matching funds plus \$998,000 in non-matching (federal) funds and will receive a \$912,600 North American Wetland Conservation Act grant. All money will be dedicated to purchasing, restoring, and

enhancing wetlands and associated uplands in the pothole area of Northwestern Wisconsin, a critical breeding area for waterfowl and other migratory birds. **11/97**

Public Input Sought for Conservation Plan

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District held a public open house the evening of November 18, 1997, to solicit public input on preparation of a Comprehensive Conservation Plan directing management of the District over the next 15 years. Attendance was light but those attending supported the Service's existing acquisition, land management, and public use programs. Specific comments included expanding the operations of the Prairie Wetlands Learning Center and continuing to restore wetlands and grasslands both on and off Service lands. Plan writing will begin once similar meetings are held at the other four districts in Minnesota with completion of a draft scheduled for June 1998. At that time the plan will be submitted to the public for additional review and comment. **11/97**

Fergus Falls District Restores 67 New Wetlands

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District restored 67 new wetlands, and repaired dikes or dams on 22 additional wetlands damaged as a result of spring flooding in 1997. These 89 wetlands are spread across Grant, Douglas, Otter Tail, and Wilkin Counties in west central Minnesota. The restored wetlands will provide breeding and brood rearing habitat for waterfowl such as mallard, blue winged teal, shoveler, green winged teal, canvasback, and redhead. Other species benefitting from this work include upland plover, long billed marsh wren and black tern. Forty-seven of the wetland restoration/repairs are located on federal Waterfowl Production Areas with 42 located on private lands. **11/97**

Fergus Falls, Minnesota Work to Restore Prairie Sites

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District in cooperation with the Minnesota Department of Natural Resources AmeriCorp program are restoring prairies in western Minnesota. Many of these native prairie sites have been protected from fire or disturbed permitting invasion by exotic tree species. The Department of Natural Resources AmeriCorp crews will be removing or “girdling” these trees permitting the habitats to return to open prairie grassland. **11/97**

Red River Valley Flood Damage Repairs Began

Fergus Falls Wetland Management District

This past fall staff from the Fergus Falls Wetland Management District began repair of facilities damaged during the severe 1997 spring flood. Repairs were made to public use facilities such as access trails, parking lots, and boundary fences. In addition, 37 staff gauges damaged by high water and ice were replaced on wetlands managed to increase waterfowl production. The station is also conducting surveys and collecting information for the repair next spring of more than 15 water control structures and dikes that were damaged during the 1997 spring flood. These repairs will allow the station to again manage these wetlands as breeding pair and brood habitat for ducks and geese. **11/97**

Fergus Falls Wetland Management District Prepares for Controlled Burning

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District installed over 7.5 miles of firebreaks during the fall of 1997 to permit controlled burning on more than 1,500 acres of prairie grasslands during the spring of 1998. Prairie grasslands evolved in a fire-dominated ecosystem. Controlled burning duplicates this natural process invigorating the stands of grasses and wild flowers to provide excellent wildlife cover. Controlled burns at the station will begin in April of 1998. **11/97**

Corporate Workshop Held for North American Waterfowl Management Plan

Joint Venture Office

On November 17-18, 1997, Joint Venture Coordinator Jim Leach attended a “corporate sponsorship” workshop hosted by Phillips Petroleum Corporation. Phillips is an active partner in the Playa Lakes Joint Venture, and wanted to get more involved in assisting other

joint ventures achieve the goals of the North American Waterfowl Management Plan. Phillips has agreed to serve as a mentor to the Upper Mississippi River/Great Lakes Region and Prairie Pothole Joint Ventures. Phillips will assist the Joint Venture Coordinators in establishing relationships with other corporations and better understanding their needs, so that these corporations can become active partners in achieving the objectives of the North American Waterfowl Management Plan. **11/97**

Ashland Conducts Customer Survey

Ashland Fishery Resource Office

In November 1997, the Ashland Fishery Resources Office repeated a “customer” survey, done for the first time in 1992. The one-page, postage-paid questionnaire asked respondents to list three good things done in the past, three unmet resource needs, problems experienced, and program changes needed. Recipients included state, federal, and tribal agencies in Minnesota, Wisconsin, and Michigan. Twenty-two responses were received, providing guidance for future cooperative activities. **11/97**

Waterfowl Partners Hire Biologist to Promote Wetland Reserve Program

St. Croix Wetland Management District

Natural Resource Conservation Service, Wisconsin Waterfowl Association and the Service partnered to hire a biologist dedicated to promoting the Wetland Reserve Program in Wisconsin. Biologist Jim Reimer was hired by the WWA and will spend at least the next year and a half restoring wetlands and enrolling land into the Wetland Reserve Program. The NRCS contributed funding, and the Service is providing work guidance, office space, and administrative support. **12/97**

Minnewaska Area High School Field Trip

Morris Wetland Management District

District staff gave a presentation on wetlands and native prairie to three Eighth grade classes from the Minnewaska Area High School. There were approximately 70 students. The event was a field trip at Glacial Lakes State Park. **12/97**

Health Assessment of Shovelnose Sturgeon Conducted at Two Mississippi River Sites

LaCrosse Fish Health Center

Shovelnose sturgeon were sampled from two sites on the Mississippi River by Ken Phillips and Chelsea Berg, LaCrosse Fish Health Center, and Mike Coffey of the Rock Island Field Office. Twenty-four sturgeon were sampled from Pool 16 near Davenport, Iowa, on October 30, 1997 and 17 sturgeon from the Mississippi River near Sainte Genevieve, Mo., on November 20, 1997. Upon completion of laboratory assays, results will be entered into the National Wild Fish Health Survey database. **12/97**

Population and Habitat Viability Analysis Workshop Held for Winged Mapleleaf Mussel *Twin Cities Field Office*

The Services Twin Cities Field Office recently sponsored, a population and habitat viability analysis workshop for the federally-endangered Winged mapleleaf mussel. The workshop was conducted at no cost by the Conservation Breeding Specialist Group of Apple Valley, Minnesota. Participants included representatives of state and federal conservation agencies, private mussel consultants, academic experts, and power company and state highway departments. The final report contains current information on the species and current thinking on problems and recommended actions to preserve and recover the species. **12/97**

Minnesota Congressman Visits the Litchfield Wetland Management District Office

Litchfield Wetland Management District

Congressman David Minge visited the Litchfield Wetland Management District Friday, December 5, 1997. During the 45-minute visit, Minge and his aide Shelly Zagaros, familiarized themselves with the function and operations of the Service offices in Litchfield. Congressman Minge met all staff who were present, took a quick tour of our meager office setting, and then spent the bulk of his time asking questions about our various programs and receiving briefs on Service programs and challenges. Topics we covered during the visit included refuge revenue sharing payments, weed control, wetland delineation, wetland mitigation, maintenance of drainage systems, outreach and environmental education. **12/97**

American Bittern Program Presented During Meeting

Rice Lake National Wildlife Refuge

Rice Lake Refuge staff presented a program on American bittern research he completed at Agassiz National Wildlife Refuge at the Minnesota Ornithologist Union annual meeting at the Bell Museum in St. Paul, Minnesota **12/97**

Service, Electric Company Restore Osprey Nest Platform

Rice Lake National Wildlife Refuge

When an abandoned power pole supporting an osprey nest fell over on his property, Jon Sampson, an Aitkin County, Minnesota, landowner became concerned for the affects on the osprey. Mr. Sampson contacted Rice Lake Refuge and Mille Lacs Electric Cooperative in an effort to replace the nest pole. Rice Lake Refuge built a nest platform and Mille Lacs Electric mounted the platform on a power pole which was then installed on Mr. Sampson's property at the old nest site near Wilkins Lake. **12/97**

Tallgrass Prairie Project's Environmental Impact Statement Draws Positive Comments *Realty*

The Environmental Impact Statement for the Northern Tallgrass Prairie Habitat Preservation Area (HPA), released in August 1997, drew a majority of favorable responses during the comment period which ended November 6, 1997. The HPA, through voluntary efforts, seeks to protect remnant prairie in 85 counties in Minnesota and Iowa. More than 180 people participated in 10 open houses held throughout the project area. The Service received 128 letters with 106 in support of the project and the Service's preferred alternative. Comments included 14 positive responses from government agencies such as the Minnesota Department of Natural Resources and nonprofit organizations such as the Iowa Audubon Council and the Minnesota Prairie Chicken Society. Comments opposing the project expressed concern about Federal government involvement and the impact on the local taxes. **12/97**

Sportfish Funds Buy 7,026 Acres in Iowa, Minnesota, Wisconsin, Michigan, and Ohio
Federal Aid

A total of 7,026.65 acres were bought by the States of Iowa, Minnesota, Wisconsin, Michigan, and Ohio using Sportfish and Wildlife Restoration grant monies administered by the Division of Federal Aid. **12/97**

Two New Waterfowl Production Area Tracts Acquired

St. Croix Wetland Management District

St. Croix Wetland Management District purchased two tracts of high-quality habitat to enlarge existing Waterfowl Production Areas in Dunn County, Wisconsin. The land will increase the amount of wetland and upland habitat protected and dedicated to migratory birds and will also provide additional wildlife-dependent public recreation. **1/98**

New Young Waterfowlers Program a Smashing Success

Minnesota Valley National Wildlife Refuge

Staff from Minnesota Valley National Wildlife Refuge, Minnesota Waterfowl Association, Minnesota Duck and Goose Callers Association, and Burger Brothers hosted a wild game dinner on January 24. More than forty people enjoyed delicious wild game dishes and a recognition program. The newly-designed program included the new audio-visual training system, new lesson plans and format, and the wild game feed. **1/98**

Refuge Partnership Banquet Recognizes Contributions of 200 Volunteers

Upper Mississippi River National Wildlife and Fish Refuge

The second annual joint Refuge and LaCrosse Fishery Resource Office volunteer banquet was held on January 23, 1998. More than 60 people attended the event which was held to honor the nearly 200 volunteers who contributed more than 4,700 hours to the two Divisions during 1997. The "Volunteers of the Year" were Donald Schroeder (Refuges) and Bob Ruud (Fisheries), both had more than 250 hours each during the year. Special recognition awards were given to the Friends of the Upper Mississippi River Refuges, Western Wisconsin Technical College, Dresbach Information Area, and Southern Bluffs. **1/98**

Mallard Nesting Structures Located Using Global Positioning System

Tamarac National Wildlife Refuge

Lowell Deede, Tamarac National Wildlife Refuge, provided assistance to Dave Rave, Minnesota Department of Natural Resources, in collecting location coordinates for 54 of 130 mallard nesting structures in Grant County, Minnesota. A precise, lightweight Global Positioning System receiver was used to collect the data. The data will be added to Minnesota Department of Natural Resources's Geographic Information System. **1/98**

Service Staff Help Judge Science Fair Projects

Morris Wetland Management District

Darrell Haugen, Kenton Moos, and Chad Raitz from the Morris Wetland Management District office judged science fair projects at the Morris High School. There were over 200 students with projects. Some of the projects will go onto the state competition. **1/98**

Wildlife Film Festival At Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

More than 200 people attended the three evenings of the Wildlife Film Festival held Jan. 22 and 29; and Feb. 5, 1998, at Sherburne National Wildlife Refuge. Each evening, films were shown that covered a wide variety of information on wildlife and wild lands common to the Refuge and included topics ranging from beavers, the marsh, and birdwatching to animal camouflage, Canada geese and wild turkeys. **1/98**

50 Attend Public Meeting for Mt. Park Restoration Project

Windom Wetland Management District

Local interest in the restoration of the drained, 1,100 acre Mt. Park wetland, led to a public meeting to discuss options and evaluate public support. Approximately 50 people attended the meeting. **1/98**

Landowners, Residents Receive Moose Updates by Mail

Agassiz National Wildlife Refuge

Approximately 1,300 landowners and residents in Thief River Falls, Viking and Newfolden, Minn., received a bulk mailing update on the moose research project and anticipated future activities. The January, 1998, mailing thanked residents and landowners for their continuing cooperation and support of the moose captures, telemetry work and notifying cooperators of sick or dead moose. This update was sent jointly from Agassiz National Wildlife Refuge and the Minnesota Department of Natural Resources. This is the second such bulk mailing on the project. Congressional staffers were also sent copies. **1/98**

Scientists Reach Consensus on U.S. Dioxin and PCB Risks

East Lansing Field Office

U.S. Environmental Protection Agency and Department of the Interior hosted a workshop on the application of 2,3,4,8-TCDD toxicity equivalency factors to fish and wildlife pursuant to the Service's Biological Opinion on the Great Lakes Water Quality Guidance. The workshop was held January 20-22, 1998 in Chicago. Scientists from Europe and North America discussed the current way that risks to fish and wildlife from mixtures of dioxin-like compounds (including dioxins and PCBs) are assessed and concluded that the current methods used in the United States should be changed. The scientists agreed that a toxicity equivalency approach is technically more appropriate and reduces uncertainty relative to assessing risk to individual compounds. The results of the workshop will be published and presented to EPA's Scientific Advisory Board. The published results will also be used by agencies and private parties in evaluating risks to fish and wildlife from these compounds. **1/98**

Land Acquisition- Big Stone Wetland Management District

Big Stone Wetland Management District

Commissioners in Lincoln County, Minnesota, certified two grassland easements while Lyon County, Minn., commissioners certified one 102-acre fee title tract. They indicated they were pleased to deal with the Service. **2/98**

Lake Sturgeon Restoration Topic of Coordination Meeting

LaCrosse Fishery Resource Office

A coordination meeting was held in St. Cloud, Minn., involving LaCrosse Fishery Resource Office, White Earth Biology Department, and the Minnesota Department of Natural Resources (Fisheries). Main topics were lake sturgeon restoration, 1997 and 1998 fish management activities, Marsh Creek impoundment and fish genetic issues. The meeting was extremely productive with group consensus on most of the issues. **2/98**

Horicon Refuge Assists Wisconsin Department of Natural Resources Public Meeting

Horicon National Wildlife Refuge

Refuge staff gave a presentation at a public meeting held February 3, 1998 on water level management experiences from Horicon National Wildlife Refuge. The Main Pool on the State end of Horicon Marsh has been held at relatively consistent levels for about 20 years. Wisconsin Department of Natural Resources managers would like to manage their water levels in a marsh cycle (such as Horicon National Wildlife Refuge) with the first step being a draw down for their Main Pool. Almost 80 people attended the meeting to address reasons for changes in water level management, expected vegetation and wildlife responses, and long range plans for management. Public response was positive and supportive. **2/98**

Savage Fen Management Plan Finalized

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge staff participated in several planning meetings and public open houses as part of the effort to develop a Savage Fen Management Plan. This plan will be used as a guide to assist decision makers in the review and comments on development projects that have the potential to affect the fen wetland complex. Currently more than 200 acres of the complex are currently within the refuge boundaries. **2/98**

County Commissioners Approve Two Waterfowl Production Area Tracts

Minnesota Valley National Wildlife Refuge

Two Waterfowl Production Areas (WPAs) totaling 155 acres were purchased with federal Duck Stamp funds. The WPAs were approved for purchase by the Blue Earth and Rice County commissioners. These areas are located adjacent to state wildlife management areas and will provide excellent habitat. Wetlands and grasslands will be restored on the WPAs. The next step in the process is to obtain approval from the state land exchange board. **2/98**

Illinois Hunter Pleads Guilty to Killing Swan

Springfield Law Enforcement Office

A trumpeter swan was killed by waterfowl hunters Nov. 11, 1998, at the Lower 40 Duck Club on Ingram Lake in Mason County, Illinois. The dead swan was later retrieved by the hunters and hidden in a hunting blind.

Conservation Police Officers from Illinois' Department of Natural Resources and the Service (Special Agent Timothy Sante) investigated the incident. The investigation revealed that Larry R. Fletcher, Dawson, Illinois, had shot, killed, and then hid the swan. Fletcher was charged in U.S. District Court, Springfield, Illinois, with unlawfully killing the protected swan, a violation of the Migratory Bird Treaty Act. On February 24, 1998, Fletcher plead guilty in a federal court to the charge and was fined \$250.00 plus \$25.00 court costs, and ordered to pay \$1,250 in restitution to the Trumpeter Swan Recovery Program. **2/98**

Greater Prairie Chicken Sighted on Waterfowl Production Area

Litchfield Wetland Management District

On February 11, 1998, two District personnel reported seeing a grouse-like bird fly out of a small box elder tree on the Schaefer Waterfowl Production Area in south-central Kandiyohi County. Upon returning to the District office, they consulted the field guides and concurred that it was indeed a Greater Prairie Chicken (*Tympanuchus cupido*). Local birding enthusiasts were contacted, investigated the area, and observed the bird perching in the same tree three days later. This is the first chicken seen in Kandiyohi county in many years, probably migrating through a bit farther east than most of its relatives. **2/98**

Refuge Staff Presents Facts on Refuge Watershed Management

Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge co-hosted a meeting for members of the Red Lake Watershed District, several Minnesota county commissioners, and representatives from local communities to present the facts concerning water management on a wildlife refuge and within a watershed. Refuge staff explained why wildlife refuges are not willing to do total fall drawdowns on impoundments to provide more flood storage, and discussed the health concerns related to hydrogen sulfide. The meeting was attended by County commissioners from Marshall and Pennington Counties, Six members of the Red Lake Water Shed District, representatives from the town of Thief River Falls, Minn., and Eight Minnesota Department of Natural Resources staff from the Divisions of Wildlife, Eco-services and Fisheries. **2/98**

Minnesota Valley National Wildlife Refuge Hosts River Celebration

Minnesota Valley National Wildlife Refuge

On February 19, 1998, the Minnesota Board of Soil and Water Resources and the United States Department of Agriculture officially announced a joint effort to restore and protect up to 190,000 acres of the Minnesota River lands as part of the Conservation Reserve Enhancement Program (CREP). The announcement and celebration was held at Minnesota Valley National Wildlife Refuge Visitor Center and those in attendance included Governor Arnie Carlson, Senator Paul Wellstone, and Representatives David Menge and Bruce Vento. **2/98**

Big Stone National Wildlife Refuge qualifies as a Globally Important Bird Area...

Agents Investigate Bald Eagle Deaths Near El Dara, Illinois

Springfield Law Enforcement Office

Service agents responded to a call from the Illinois Department of Natural Resources concerning a die-off of bald eagles on Kiser Creek, near El Dara, Illinois. During a field inspection on February 15, five dead bald eagles and three sick bald eagles were recovered from a roost site along the creek. The dead birds were seized by the agents and forwarded to the National Fish and Wildlife Forensics Lab, Ashland, Oregon, to determine cause of death. It is suspected that the eagles were poisoned. It is unknown at this time what type of poison was involved. A criminal investigation will be conducted by Special Agent Tim Santel. The three sick eagles were brought to an area vet who treated the eagles. All three have recovered and were released on Feb. 24, 1998, near Louisiana, Mo., along the Mississippi River. **2/98**

Boy Scout Troop 353 Builds Wood Duck Boxes

Litchfield Wetland Management District

Boy Scout Troop 353 from Litchfield, Minnesota, constructed 16 high-quality cedar wood duck nesting boxes on February 21, 1998, for distribution by the Litchfield Wetland Management District. They plan to construct a total of 50 structures with materials that were left over from the 1998 Duck Habitat Day held at the Minneapolis Convention Center in January. The materials were donated by Gander Mountain. **2/98**

Big Stone National Wildlife Refuge Designated as 'Globally Important Bird Area'

Big Stone National Wildlife Refuge

Big Stone National Wildlife Refuge qualifies as a Globally Important Bird Area in American Bird Conservancy's U.S. Important Bird Area's program. Specifically, it provides habitat for more than seven percent of the eastern prairie population of Canada Geese during fall migration. It also provides habitat for a continentally significant number of mallards during fall migration. **2/98**

'Sentenced to Service' Crew Builds Henhouse on Waterfowl Production Area

Litchfield Wetland Management District

The Minnesota Department of Corrections 'Sentenced to Service' crew of Meeker County assisted the Litchfield Wetland Management District office in building over-water nesting structures (hen houses). The crew cut used carpet into the 3 x 4.5- foot pieces used to protect nesting waterfowl from sun, wind, rain, and avian predators. They then used the carpet, 1,400 feet of woven wire fencing and a stack of native grass hay bales to produce 130 hen houses. These nesting structures will be placed in open water marshes on local WPAs and possibly on private land wetland restorations. **2/98**

LaCrosse Presents 'Introduction to Fish Health Management' Course

LaCrosse Fish Health Center

The LaCrosse Fish Health Center staff instructed a five-day "Introduction to Fish Health Management," course from February 9-13, 1998 in Onalaska, Wisconsin. A total of 13 students participated in the course including state, tribal, commercial, and federal biologists from across the United States. Lecture topics included stress management, parasitology, bacteriology, virology, drug treatments and calculations, and environmental and nutritional diseases. Laboratory instruction included preliminary identification of bacterial and parasitic agents, preparation and shipment of health samples, and a field trip to the Genoa National Fish Hatchery, Genoa, Wisconsin. Course instructors included Rick Nelson, Becky Laser, Terry Ott, John Whitney, Ken Phillips, and Mike Systma. **2/98**

700 Attend Winter Fun Day At Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

Nearly 700 people attended the annual Winter Fun Day at Sherburne National Wildlife Refuge on February 14, 1998, to celebrate wildlife in winter, winter recreation and the Refuge System Birthday. This family oriented event included horse drawn sleigh rides with volunteer interpreters on board, a snowshoe hike, snowshoeing, *skijoring*, cross-country skiing, talks on wildlife in winter and winter bird feeding and a feature program on dog sledding. The day ended with a candlelight ski and bonfire at Sand Dunes State Forest which drew nearly 130 skiers. **2/98**

Sherburne National Wildlife Refuge Recognizes 500 Volunteers

Sherburne National Wildlife Refuge

At a special awards dinner held on March 12, Sherburne National Wildlife Refuge recognized a total of 500 individuals from local communities, scout troops, school classes, 4-H clubs and other conservation groups who contributed over 6,600 hours of service to the Refuge during 1997. Volunteer projects varied according to the needs of the Refuge and the interests and abilities of the volunteer and included wildlife interpretation, adopt-a-trail, adopt-a-road, special events assistant, general maintenance, resource assistant and more. **3/98**

Windom Co-Sponsors Forum For Prescribed Burning of Habitat

Windom Wetland Management District

Prescribed burning in the spring to improve wildlife habitat is effective, but poorly understood by the public. Controversy and opposition have resulted from the lack of understanding concerning the need for fire on prairie habitat. A Forum on Prescribed Burning for wildlife was co-sponsored by the Windom Wetland Management District and the Cottonwood County Game and Fish League. The featured speaker was Professor Ken Higgins from the Wildlife Coop Unit at South Dakota State University. **3/98**

Last Captures of Three-Year Moose Study Completed

Agassiz National Wildlife Refuge

The last capture of moose as part of a three-year study into investigating the dramatic decline in moose numbers in northwest Minnesota, occurred March 6-12. A total of 30 animals were captured in the three study sites: Agassiz National Wildlife Refuge, Red Lake Wildlife Management Areas, and Viking Agricultural Area. The moose were captured by using a helicopter and a net gun. Radio collars were placed on a total of 21 new cows and one new yearling. Seven recapture cows and one yearling had old collars replaced. Blood samples were taken from all animals for pregnancy and lab screens for disease and nutritional screening. There are 81 collared animals in the study sites: Agassiz National Wildlife Refuge 30; Red Lake WMA 19; Thief Lake WMA 8; Viking Agricultural Area 24. **3/98**

Necedah National Wildlife Refuge Hosts Federal Junior Duck Stamp Contest

Necedah National Wildlife Refuge

The Wisconsin Federal Junior Duck Stamp contest was held March 25, 1998. A total of 806 entries from young artists in grades kindergarten through 12 was received from 90 schools. The "Best of Show" for Wisconsin went to Nina Goralski, an 11-year old student from Oconomowoc.. Wisconsin Waterfowl Association again co-sponsored the event by arranging for the five judges and providing publicity and contest prizes. After being on display at the Necedah Refuge until April 25, 1998, the display of winning artwork will travel to various nature centers, refuges, and other places around the state. **3/98**

Environmental Education: Students See Wolf Collared

Agassiz National Wildlife Refuge

Wolves in three packs will be radio collared as part of a three-year study on wolves at Agassiz National Wildlife Refuge. This is the only study of wolves occurring in primarily an agricultural area. Prairie Wind Middle School/Perham High School have secured grants to purchase two satellite collars (\$8000) for the study and to give students real-time" experience with research. The school has also secured grants to initiate a Research Science Curriculum. Several pilot schools have been selected for 1997-98 to incorporate Geographic Information System capabilities. Through GIS and the Internet, students track their collared wolf, design a web page, gather facts on wolf biology, management, controversy, and in the field to experience first-hand wildlife management and research techniques. Grants are being written to expand this capability to other wildlife and natural resource concerns, for example biological control agents for control of noxious weeds. At the Refuge, students see how animals are captured, collars placed, and data collected. Only one wolf, an alpha male, was captured and a radio collar was placed on it and data collected. **3/98**

Morris Area High School Mentorship Program

Morris Wetland Management District

Kenton Moos and Wayne Henderson participated in the Morris Area High School Mentorship Program on March 26, 1998. They had two students at the District office for seven hours. Kenton and Wayne explained their jobs, required education, did mock job interviews, explained the mission of the Service, and performed field work. **3/98**

Impromptu Eagle Watch Results in Numerous Visitors

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge promoted and staffed an impromptu "Weekend Eagle Watch Event" for the purpose of inviting the public out to view the eagles using the Upgrala unit of the Refuge. Approximately 1,500 individuals came out to view the 60-100 eagles for this two-day event. The public was most appreciative of our efforts and interested folks from as far away as Hutchinson, Minn., came to participate in this splendid display of wild critters within an urban setting. **3/98**

Benson Area High School Career Days

Morris Wetland Management District

Benson Area High School held a Career Day on March 31, 1998. Kenton Moos, biological technician, talked to 23 students interested in biology. There were two, 45-minute sessions. Moos explained his job with the Service, employment education requirements, Service career opportunities and answered students' questions. **3/98**

Migratory Bird Conservation Commission Approves Grants to Region 3 Partners

Joint Venture Office

On March 4, 1998, the Migratory Bird Conservation Commission approved four Region 3 North American Wetlands Conservation Act grants for a total of \$2,487,056. The Red Lake Farm-Kiwosay Habitat Restoration Project, Phase II, will restore 425 acres of wetlands and 800 acres of uplands on the Red Lake Reservation in Minnesota. The Prairie Wetland Heritage Conservation Initiative will acquire, restore or enhance 3,115 acres of prairies and prairie wetlands in 36 southwestern Minnesota counties. The Meredosia Wetland Complex Project will acquire and restore 1,160 acres of Illinois River flood plain adjacent to the Meredosia National Wildlife Refuge. The

Southern Lake Michigan Coastal Wetlands Project, Phase II, will restore 800 acres of sensitive wetland communities near the Indiana Dunes National Lakeshore. Primary partners are listed above, respectively. **3/98**

1998 Joint Venture Award Winners Announced

Joint Venture Office

The winners of the 1998 Upper Mississippi River and Great Lakes Region Joint Venture awards were announced March 20, 1998. The awards recognize the important contributions of partners to the objectives of the North American Waterfowl Management Plan. The Stewardship Award was presented to Richard Becker, a farmer and landowner in Two Rivers, Wisconsin. The Organization Award was given to Partners for Wetlands, a conservation coalition based in Alton, Illinois. The Non-game Award went to Madison Audubon Society of Madison, Wis. The Professional Award went to Dr. Robert Gates, of Southern Illinois University. The Partnership Award was presented to Robert Jackson of the Bureau of Indian Affairs. **3/98**

One Wolf Captured and Collared at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

The Elm Lake and Golden Valley wolf packs were to be located with the aid of individual animals previously collared. Unfortunately, radio-collared animals in the Elm Lake pack had been removed, making location difficult. Conditions were unfavorable for spotting animals due to little or no snow. By using an airplane, by driving roads, four wolves were located. Unfortunately, the helicopter could not be deployed in time for capture. The four wolves were spotted in the Elm Lake pack. One wolf was captured from the Golden Valley pack. The satellite-collared wolf on the north end of the refuge was located once. **3/98**

Media On-Hand For Moose Captures and Annual Deer Survey

Agassiz National Wildlife Refuge

Grand Forks Herald and Grygla Eagle newspaper were on-site for helicopter moose capture photos on Agassiz National Wildlife Refuge and private lands. Gary Tischer, Refuge operations specialist, and Eric Cox, PhD student, were interviewed. KTRF radio interviewed Gary Huschle on the 1998 Deer Survey. Deer numbers were lowest on record at 432. **3/98**

Community Leaders Tour New Prairie Wetlands Learning Center

Fergus Falls Wetland Management District

On March 1, 1998, Fergus Falls District hosted an open house and tour of the Prairie Wetlands Learning Center for local community leaders and members of the Friends of the Prairie Wetlands Learning Center. Attendees toured the facility under construction (about 75 percent complete) and had questions about the building and programs answered. **3/98**

Bird Boxes in Place for Agassiz Contaminant Study

Agassiz National Wildlife Refuge

Dave Warburton, Twin Cities Field Office, and Chris and Tom Custer, U.S. Geological Survey-Biological Resource Division, placed 180 swallow nest boxes in five locations on Agassiz Refuge. Boxes were placed in three areas where water flows into the Refuge (Mud River, Thief River), an interior area (west side of Agassiz Pool), and one out flow area (Parker Pool). Preliminary investigations have revealed evidence of mercury and cadmium in some water bird species. The study is designed to evaluate uptake and affects of metals on refuge wildlife. **3/98**

Red Lakes Walleye Fishery Restoration Plan Completed

Ashland Fishery Resource Office

The Upper and Lower Red Lakes of northwestern Minnesota are "walleye factories" that have produced yield of millions of pounds of walleye for generations, benefitting Chippewa Indians on the Red Lake Reservation and Minnesota anglers. Over harvest and uncoordinated management resulted in severe depletion of the walleye stocks. Now, for the first time, the state and tribal governments responsible for management have forged a partnership to bring back the fishery, with assistance from federal agencies and the University of Minnesota. The plan calls for zero mortality of walleye until restoration milestones are reached. The Service also assisted the Red Lake Band in assessing the status of walleye reproduction in Lower Red Lake. **3/98**

LaCrosse Hosts Lake Sturgeon Coordination Meeting

LaCrosse Fishery Resource Office

LaCrosse Fishery Resource Office held a coordination meeting to present the White Earth lake sturgeon management plan. All comments were positive and the cooperating agencies support the project fully. **4/98**

80 Percent of Nesting Baskets Used by Waterfowl at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

A total of 109 nesting baskets that have been placed in wetlands on Waterfowl Production Areas throughout the Detroit Lakes Wetland Management District. Of these, 48 were used by mallards to produce 384 ducklings and 35 were used by Canada geese to produce 234 goslings. The use of these nesting structures by both mallards and Canada geese has increased each year since they were first installed in 1987. The percent of basket success has gone from two percent in 1988 to 80 percent in 1997. Production has gone from 24 mallards and six Canada geese in 1988 to 384 mallards and 234 Canada geese in 1997. **4/98**

Lower St. Croix Task Force Completes Planning

Twin Cities Field Office

The Twin Cities Field Office participated as one of sometimes more than 200 members of the Lower St. Croix Planning Task Force. Task Force members represented a wide variety of interests (boating, private shore land landowners, National Park Service, Minnesota and Wisconsin Department of Natural Resources, Minnesota-Wisconsin Boundary Area Commission) who were challenged to identify issues and come up with recommendations of how the Lower St. Croix National Scenic Rivera should be managed over the next 20 years. Task force members agreed on 62 of 66 management issues. The results of the task force will be used by the National Park Service in the development of a new General Management Plan for the Rivera. **4/98**

Spring Prep Day Held At Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

The annual Spring Prep Day held on April 18, 1998 at Sherburne National Wildlife Refuge was attended by nearly 200 volunteers. Individuals, families, scout, school and 4-H groups cleared litter from over 50 miles of County roads passing through the Refuge. Participants also raked leaves and washed windows at the Old School House and Refuge headquarters and worked on trail maintenance and erosion control projects. Following the projects, volunteers were provided a free lunch and an opportunity to take a guided bird tour on the Wildlife Drive. **4/98**

Sherburne Participates in Volunteer Recognition Week

Sherburne National Wildlife Refuge

Through the Volunteer Bridge, Sherburne National Wildlife Refuge joined with other government and private agencies in Sherburne County in preparing an interagency exhibit highlighting volunteer activity at each agency in recognition of National Volunteer Week, April 19 - 25. The exhibit, placed at the Elk River Library, was viewed by more than 3,000 people. **4/98**

Partnership Receives Technology Grant

Fergus Falls Wetland Management District

A partnership between Fergus Falls School District 544 and the Prairie Wetlands Learning Center has resulted in a \$75,000 technology grant to link the school district and community. The grant provided by the Minnesota Department of Children, Families, and Learning will allow the Center to act as an auxiliary learning site with direct computer links to classrooms. The grant will provide for the purchase of computers, field data entry modules, as well as other equipment. This project sets the stage for linking the Prairie Wetlands Learning Center to other schools in Minnesota as well as nationally. **4/98**

Geographic Information System Open House Attracts Many

Upper Mississippi River National Wildlife and Fish Refuge

A Geographic Information System (GIS) Open House was held at the Upper Mississippi River National Wildlife and Fish Refuge—LaCrosse District on April 20, 1998. Approximately 30 people attended the two-hour presentation

given by Wildlife Biologist Lara Hill. The intention of the open house was to give other resource managers a chance to learn how GIS can contribute to management decisions for the LaCrosse District. **4/98**

District Members Participate in Community Mentorship Program

Morris Wetland Management District

On Tuesday, April 28, 1998, Chad Raitz participated with a Senior Mentorship program. In March, the students spent a day mentoring, and later had to give an oral presentation about their experiences. Chad Raitz evaluated the students and answered questions. There were approximately 15 students presenting, and 90 students to listen and ask questions. **4/98**

Natural Resource Damage Assessment Docket Review Completed

East Lansing Field Office

The Service and five Natural Resource Damage Assessment practitioners met with policy makers and program planners in Minneapolis on April 21-23, 1998, to discuss current and expected NRDA cases. Policy and expected funding needs through Fiscal Year 2000 were established. Legal status of cases were described so that solicitor and litigation support needs could be determined. Information was shared among biologists and attorneys for similar states. **4/98**

Service Partnerships, Wildlife Practices Explained at Meeker County Mudhens Event

Litchfield Wetland Management District

The Meeker County Mudhens hosted their third annual Greenwing outing on April 25, 1998. Approximately 83 youths and 50 adults attended. The outing includes a mix of hands-on projects such as duck calling seminars, bluebird house construction, target shooting and presentations by Ducks Unlimited (DU), state and local officials, and Service Manager Tom Bell. District Manager Bell addressed the group. Topics covered included the benefits of partnerships between DU and the Service, the benefits of prescribed fire to prairie and ducks, and what Greenwings and adult members of DU can do to help waterfowl and other wildlife. **4/98**

Habitat: 13,000 Acres Burned Under Prescription

Agassiz National Wildlife Refuge

Prescribed burns were completed in April on the following areas at Agassiz National Wildlife Refuge: Northwest Pool 2,315 acres; Madsen Pool 2,025 acres; Webster Creek 1,220 acres; Headquarters Pool 2,300 acres; Pool 8 Triangle 25 acres. The Service also partnered with the Minnesota Department of Natural Resources in burning Service land at South Pool, 2,500 acres and the DNR's Lost Pool, 2,500 acres. **4/98**

India Wildlife Preserve Managers Visit Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

Johann S. Chauhan, Deputy Director, Kauha Tiger Preserve, Mandla, India, and Kirti Shah Netam, Superintendent, Pachmari Wildlife Sanctuary, Madhya-Pradesh, India, spent five full days on Agassiz National Wildlife Refuge. This visit was arranged by the University of Idaho. The visitors spent two days with moose research student tracking animals, performing necropsies, and experiencing an air boat tour of Agassiz Pool. They spent a half day with Refuge Manager discussing management plans while touring refuge and some time with bittern project. Prescribed burning, hydro axing, water management, wilderness areas and the shop were visited. The National Wildlife Refuge System was discussed in detail. They spent a day with the wolf research team tracking/trapping wolves. The rest of the time was divided between the research crews. While here they resided at the bunkhouse. They will be traveling to Yellowstone, Bison Range, Craighead Institute and Siberia next. **4/98**

KSAX Television Interview on Nesting Structures

Morris Wetland Management District

On April 20, 1998, Jeff Hanson from KSAX Television, Alexandria, Minnesota, interviewed the District staffer Larry Lewis about artificial waterfowl nesting structures and general spring migration questions. The interview was part of a news story that was broadcast on the evening newscast April 21. **4/98**

Wetland Reserve Partners Target 2,400 Acres of Wetlands For Restoration

Wisconsin Private Lands

During the first nine months of a Wetlands Reserve Program partnership between the Service, Natural Resource Conservation Service and Wisconsin Waterfowl Association, 2,400 acres of restorable wetlands and associated uplands are in advanced stages of acceptance into the Wetland Reserve Program. These wetlands will be restored using funds from the U.S. Department of Agriculture's Wetland Reserve Program, and from the Service's Partners for Fish and Wildlife program. Three biologists have been hired by the partnership and are working out of the Service's offices in Madison, New Richmond, and Mayville, Wisconsin. **4/98**

Outreach: Monthly Coffee Time Program-Volunteers

Agassiz National Wildlife Refuge

Staff from the Agassiz National Wildlife Refuge try to appear at least once a month on "Coffee Time," a local radio and television program. Volunteers were the focus of this month's programs.. Elise Goldstein, from Maryland, was completing three months of volunteering on the Moose research project. Stephanie Nafthal, New York, just arrived to begin her three months of wolf research. Each volunteer talked about their respective projects and why they volunteer. Upcoming events, the Envirothon and International Migratory Bird Day Open House, were also discussed during the 30-minute program. **4/98**

Necedah National Wildlife Refuge Part of High School Career Day

Necedah National Wildlife Refuge

Refuge staffers manned a contact booth at the Tomah High School for Native American Awareness Week's Career Day in Tomah, Wis. Information about Necedah National Wildlife Refuge, volunteer and career brochures, endangered species fact sheets, and other handouts were distributed to more than 400 students. **4/98**

Administrative Mini-Workshop Held for Employees

Agassiz National Wildlife Refuge

Administrative Officer Wikstrom gave a three-hour administration mini-workshop to 10 refuge employees. Purchasing, time and attendance, and personnel issues were the main focus. While much of the subject matter included a much-needed review, a great deal dealt with recent changes in purchasing, time and attendance, computerization, and streamlining of administrative duties and implications for employees. Future changes and expectations were also discussed. **4/98**

Agassiz Refuge Hosts Envirothon Natural Resources Competition

Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge and Soil and Water Conservation District Offices from five northeastern Minnesota counties organized an Envirothon for the region's high school students, hosted at the Refuge. The Envirothon is an outdoor natural resource knowledge bowl held annually in most states with local, state and national competition to expose high school youth to natural resources they normally are not exposed to in a classroom. Donators for T-Shirts, medallions, can coolers and a trophy included the five Soil and Water Conservation Districts and 21 other organizations and businesses from northwestern Minnesota. Donations totaled \$1,875 **4/98**

Twin Cities Tree Trust Joins Refuge Staff to Construct Boardwalk

Minnesota Valley National Wildlife Refuge

A 130-foot boardwalk and overlook structure was constructed at the UpGrala unit of the Minnesota Valley National Wildlife Refuge. In the short term, the structure will serve as a boat dock for participants in the Disabled Hunting Program. In the long term, it will serve as a boat dock, boardwalk, and overlook for the general public. **4/98**

Minnesota Valley Refuge Conducts Junior Duck Stamp Competition

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge served as the depository for Minnesota Junior Duck Stamp Competition. More than 1,000 entries from students in grades K-12 were received. The judging took place at the Nicollet Conservation Club on Swan Lake in Nicollet, Minn. The judging was held in Nicollet due to

the tremendous support from Mankato and surrounding communities. Teachers, parents and representatives from the art community, as well as the wildlife agencies wanted a more active role in the competition. Five judges selected the 100 winning entries. The judges were Marvin Moriarty from the Service; Jeff Hedtke from the Board of Water and Soil Resources; Jeff Holmin, artist and Director of the Nicollet Conservation Club; and artists Marian Anderson from Mankato, and John House from Evansville, Minnesota. Rebecca Latham, an 18-year old home school student captured the Best-of-Show with her acrylic painting of Redheads. Rebecca's painting will be sent to Washington D.C., where it will compete at the national competition. **4/98**

Rotenone Treatment Reduces Carp; Improves Heron Lake

Windom Wetland Management District

A successful step toward improving water quality and encouraging the growth of submergent aquatic vegetation was recently accomplished by reducing the carp population in Heron Lake, a historically significant waterfowl migration area. Approximately 300,000 lbs. of carp were removed by a commercial fisherman by early February. A mid-February rotenone application was successful in killing nearly all of the remaining carp. Massive numbers of dead carp, up to 20 pounds in size, are now appearing along the Heron Lake shoreline. Northern pike will be stocked to help suppress carp reproduction. **4/98**

Foundation Honors Prairie Wetlands Learning Center

Fergus Falls Wetland Management District

The National Fish and Wildlife Foundation and the Service's National Education and Training Center announced the selection of the Prairie Wetlands Learning Center as an Earth Steward Site. The Center was one of 10 selected of which there are only 15 nationally. This selection carries with it a \$5,000 cost share grant for development of environmental education at the site. **4/98**

1998 Ruffed Grouse Drumming Survey at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

A census was conducted on two survey routes April 28, 1998, by Refuge staff. Drums were 50 percent lower than last year. Based on a 10-year cycle, 1998 was expected to be a very high peak year, but apparently Agassiz Refuge's peak year was 1997. A second count was conducted, with little change in results. The difference from 1998's surveys and the last two may be a result of record high water levels in 1996 and 1997, which may have caused birds to concentrate near roads, resulting in higher than actual counts for the past two years. **4/98**

Refuge Land Surveyed for Contaminants, Plans Made for CAP Manual

Agassiz National Wildlife Refuge

A field reconnaissance team consisting of Agassiz Refuge Biologist Gary Huschle, Dave Warburton, Ecological Services, and representatives from U.S. Geological Survey, Biological Research Division, and Dr. Bruce Eichhorst, University of North Dakota, surveyed Refuge and nearby lands for potential contaminants May 4-5, 1998. The team visited four watersheds that drain into Agassiz Refuge to determine differences and similarities with respect to land use, and potential contaminants entering the refuge. Nesting Black-crowned night heron sites were marked and swallow boxes checked. Field season plans were made and assignments for the CAP manual requirements were discussed. A technician will be on station by mid - May for data collection. **5/98**

Stem Mining Weevils Released to Control Canada Thistle

Agassiz National Wildlife Refuge

Refuge staff released 300 Stem Mining Weevils in three different locations west of Farms Pool. This is the first time biological control agents have been released on the refuge for control of Canada Thistle. Two other Canada Thistle "bugs" are scheduled for release as well. Results will be monitored by refuge staff and Perham School District students. **5/98**

Northwest Minnesota Moose Mystery Challenge Receives Award

Agassiz National Wildlife Refuge

Northwest Minnesota's Moose Mystery Challenge, a three-year study to determine the cause of the decline in Northwest Minnesota's moose herd, received a semifinalist award in the Partnership Minnesota's 1998 Cooperative Public Service Award. Agassiz National Wildlife Refuge and Red Lake Wildlife Management Area nominated the Challenge for the award in the Government and Environment category. There were three levels of recognition in this category: Cooperative Public Service Award, Semi-Finalist Award, and Governor's Certificate of Commendation. An award ceremony was held May 6, 1998, at the Partnership Minnesota Conference at the Hubert H. Humphrey Center, University of Minnesota. Partnership Minnesota, an intergovernmental partner of the Federal Executive Board, was formed in 1988 to promote enhanced cooperation between federal, state and local government agencies in their efforts to provide services to the citizens of Minnesota. Our nomination of partners included two government agencies, two universities; 70 private businesses and individuals; five conservation organizations; a local foundation; and 9,000 volunteer hours donated by volunteers and private landowners. Cash donations totaled nearly \$50,000 over the past two years along with donated equipment. The educational component of this nomination was the Adopt-A-Moose program which is reaching 19 schools (93 classes, 2700 students), three scout groups and 40 sponsors. All 88 contributors received award certificates. **5/98**

Media, Lawmakers Tour Habitat Restoration Projects

Upper Mississippi National Wildlife Refuge

The Service, U.S. Army Corps of Engineers, Wisconsin Department of Natural Resources and Brennen Construction Company sponsored a media event on May 6, 1998, to highlight the Phase II Environmental Management Program - Habitat Rehabilitation and Enhancement Project on Lower Pool 8. The event lasted approximately two hours and featured three stops including watching current construction, visiting Phase I projects, and seed islands. Television stations WXOW and WKBT, the *LaCrosse Tribune* newspaper, and two congressional aides (from the offices of Ron Kind and Gil Gutknecht) participated in the event. **5/98**

Bullrush Tubers, Seeds Planted for Agassiz Refuge Project

Agassiz National Wildlife Refuge

Refuge staff planted bullrush tubers and seeds that overwintered in different treatment conditions at Agassiz Refuge. Three tuber treatments and two seed treatments were planted in Headquarters Pool in 7 randomly selected plots in three macro sites. Planting occurred more than two days. The purpose of the project is to see if bull rush can be established in Headquarters Pool, and to see if the less time consuming method of planting seeds versus tubers would produce sufficient numbers of a plant/seed source for vigorous stand establishment. **5/98**

Waterfowl Identification Program Part of Student Conservation Day

Big Stone National Wildlife Refuge

Forestry Technicians presented a Waterfowl Habitat and Identification program to 203 students during Conservation Day on May 7, 1998, at Traverse County (Minnesota) State Park. **5/98**

Iowa Department of Natural Resources Releases 10 Trumpeter Swans at Union Slough

Union Slough National Wildlife Refuge

As part of a 10-year project to return trumpeter swans to northern Iowa, the Iowa Department of Natural Resources has released annually 8 - 10 captive reared swans on suitable wetlands in the northern tier of counties. In 1998, Union Slough National Wildlife Refuge was selected for the release of ten swans. The slough was selected primarily due to the high quality of the wetland habitat, the relative seclusion the Refuge provides, and the geographic location in relation to other releases. **5/98**

First Annual Bird Festival at Big Stone National Wildlife Refuge

Big Stone National Wildlife Refuge

Big Stone National Wildlife Refuge celebrated International Migratory Bird Day with the first annual Big Stone Bird Festival, May 8 - 10, 1998. More than 50 bird enthusiasts from five states attended. A highlight of the festival included the "Turn of the Century Birding Train Ride," Another memorable event occurred when a Eurasian Collared Dove was observed. Also, a peregrine falcon was seen and adult nesting bald eagles were observed caring for

their newly hatched young at the nest. About 125 different species were observed. **5/98**

Minnesota Valley Hosts International Migratory Bird Day

Minnesota Valley National Wildlife Refuge

Refuge and volunteer staff created a deeper awareness of migratory birds during a six - hour special event at the Como Zoo in St. Paul, Minn. The outreach activity allowed us to contact a diverse ethnic and inner - city audience which is less likely to visit Minnesota Valley National Wildlife Refuge. **5/98**

International Migratory Bird Day Partners Setup Displays at Dresbach Information Area

Upper Mississippi River National Wildlife and Fish Refuge

Members from the Friends, Upper Mississippi River Refuge and Coulee Audubon along with Refuge staff set-up displays at the Dresbach, Minn. Information Area, just west of LaCrosse, Wis., on Interstate 90. The groups contacted approximately 65 people who stopped by the displays. **5/98**

Students Assist With Refuge Tree Planting

Big Stone National Wildlife Refuge

Twenty-eight high school students assisted with a tree planting project on Big Stone National Wildlife Refuge. Twelve students were from the agriculture class at Milbank High School, Milbank, South Dakota, and 16 students were from the environmental science class at Ortonville High School, Ortonville, Minnesota. A challenge grant was received for river corridor enhancement. **5/98**

Volunteers Construct Footbridge on Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

A 30 ft. wooden footbridge over the drainage creek from School House Pool was constructed with labor assistance from six volunteers from the Telephone Pioneers of America and funding assistance from Minnesota Bowhunters, Inc. and the Friends of Sherburne National Wildlife Refuge. **5/98**

Big Stone Staff and Minnesota Department of Natural Resources Survey Waterfowl

Big Stone National Wildlife Refuge

Again this year, Big Stone National Wildlife Refuge employees, Rich Papasso, Eric Rozowski and Stephen Revering participated with the Minnesota Department of Natural Resources in conducting the breeding pair count in Big Stone, Douglas and Grant Counties. This is an annual count of waterfowl trends in Minnesota. **5/98**

Prairie Preservation Project Decision Part of Detroit Lakes Festival of Birds

Tamarac National Wildlife Refuge

The event included field trips, bird walks, arts and crafts, a banquet and other activities. At total of 230 birders registered to take part in trips and banquet, while more than 500 people attended the variety of activities offered. Regional Director Bill Hartwig attended the Saturday evening banquet, signing the record of decision to create the Northern Tallgrass Prairie Preservation Project. The festival was funded, in part, by a Service Challenge Grant, partnering with the local chamber of commerce, birding club, and other Detroit Lakes businesses and organizations. **5/98**

Friends of Sherburne Refuge Help Celebrate International Migratory Bird Day

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge partnered with the Friends of Sherburne in celebrating International Migratory Bird Day by offering a day of guided birding tours on the Refuge. A total of 54 people participated in the three tours, each designed to reach a different level of birding experience. Visitors came from as far away as Australia and Bemidji. Awareness of International Migratory Bird Day was spread throughout the communities surrounding the Refuge through community education bulletins, news releases and by distribution of International Migratory Bird Day posters to local schools. **5/98**

19. Writers For Birding Publications Tour Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

Three writers for birding magazines were given a four hour tour of Agassiz National Wildlife Refuge by Refuge staff. The Minnesota Office of Tourism in Thief River Falls, Minnesota, arranged the five-day bird tour of northwestern Minnesota, and paid the birders' expenses. . An

air boat ride to the Franklin's gull, black-crowned night heron and eared grebe colonies allowed close up viewing of the birds, nests, young and adults. Photographs were taken by one of the writers. The tour of Agassiz National Wildlife Refuge will increase exposure of the bird life on the refuge to many citizens of the United States with articles to be written in national birding magazines. With more exposure to the public more people who enjoy birding and watching wildlife will visit these areas. **5/98**

Sherburne National Wildlife Refuge Burns 6,323 Acres

Sherburne National Wildlife Refuge

The extensive prescribed burning program at Sherburne National Wildlife Refuge is in support of the Refuge's landscape objectives of maintaining remnant Oak Savanna, Oak Woodland - Brushland habitat, and conversion of degraded habitat to Oak Savanna, Oak Woodland - Brushlands. Oak Savanna, Oak Woodland - Brushland is the historic habitat of the area and contains some of the most species rich plant communities in Minnesota. The spring of 1998 provided ideal weather conditions for the planned burning. Supporting the effort were Refuge Staff, along with staff from St. Cloud Private Lands Office, and Rice Lake National Wildlife Refuge. Also, several students from St. Cloud State University, who had been trained to participate in the Refuge's fire program, assisted. These students were able to be paid for their labor through a prescribed fire account. **5/98**

200 Students Compete in Envirothon - Area 2 Morris Wetland Management District

On May 7, 1998, Morris District staffers were presenters at the Area II Envirothon. There are five stations at which the students take a 20 point test. Morris staff created the test for the Wildlife station. There were approximately 200 students who participated. The top three teams go to the State Envirothon which will be on May 20, 1998, at White Water State Park. **5/98**

Morris Area High School Career's Class

Morris Wetland Management District

On May 12, 1998, the Morris Area High School ninth grade students visited the office about career opportunities with the Service. Five classes, totaling 110 students that visited the office. **5/98**

Environmental Education Training for Teachers

Windom Wetland Management District

15 Worthington, Minnesota, area teachers attended environmental education training in wetland values and wildlife management conducted by the Heron Lake Environmental Education Center. Training was completed on the Worthington Waterfowl Production Areas with the use of the EcoBus. **5/98**

Service Partners with Community on Waterfowl Productions Area Cleanup

Litchfield Wetland Management District

The Litchfield office coordinated with Albion Township resident, Sharol Rau, on a large cleanup project for Albion Waterfowl Production Area and the Libby Lake shore area. The Service paid hauling and disposal fees; Albion Township donated a front end loader; and community volunteers provided the sweat and labor. On May 16, 1998, 37 volunteers committed 222 hours to collect over 6 tons of trash which had accumulated along the steep shoreline, including, furniture, tires, wire, containers, and appliances. The area will be re-posted and closely monitored to curb future dumping activities. **5/98**

50 Acres of Globally Endangered Habitat Restored

Sherburne National Wildlife Refuge

This project, completed through partnerships with Princeton High School and Refuge volunteers, re-established the oak canopy into 50 acres of previously restored native prairie understory to recreate the globally endangered oak savanna vegetation type. The site was prepared by prescribed burning and the 500 local seed source bareroot mixed oak seedlings were hand planted with fertilizer. Planting seedlings is desirable because it accelerates the natural seeding which occurs very slowly in these grasslands due to the fact that acorns do not fall far from the parent trees. **5/98**

Morris Hosts Sixth Annual Wetland Field Day

Morris Wetland Management District

On May 21, 1998, the Morris Wetland Management District staff held its sixth annual wetland field day. There were 160 second grade students, teachers and parents that attended. Second graders from Morris, Chokio-Alberta, Cyrus and Starbuck schools participated. It is a day of interactive learning and fun. The students learn about wetland plants,

invertebrates, wildlife, nesting structures, water quality, how glaciers formed the prairie pothole region, and predator prey relationships through a game of duck dodge ball. **5/98**

Prescribed Burning Record at St. Croix

St. Croix Wetland Management District

Working together with a local Department of Natural Resources office, the St. Croix Wetland Management District burned over 1000 acres of grassland during the spring burning season, the highest total ever for us. Sites burned included Waterfowl Production Areas, private land and state land. Some of the private lands sites were native prairie remnants that had never been burned under prescription. Other burns were to establish and maintain native seedings on public and private land. **5/98**

Fishery Specialists Part of Interagency Paddlefish Study

Columbia Fishery Resource Office

Specialists from Service fishery resource offices in Columbia, Mo., and Carterville, Ill., met recently with representatives from the 22 state and federal agencies participating in MICRA's (Mississippi Interstate Cooperative Resource Association) Paddlefish Coded Wire Tagging Project to review study protocol and define incoming data problems. The project will acquire data on tagged hatchery-raised and wild paddlefish. The collected data is expected to capture paddlefish population size, exploitation rates and movements. MICRA is a forum for states that share the Mississippi River to discuss interjurisdictional issues, and share resources. **5/98**

Minnesota Denies Road Construction Permit Through Savage Fen

Twin Cities Field Office

The Minnesota Department of Natural Resources denied a permit under the state's Wetland Conservation Act to Scott County for its plan to construct a four-lane, \$2.75 million road through the Savage Fen. Fens are very rare wetlands and this is one of the largest remaining fens. Approximately 90 acres of the 425-acre Fen are a part of Minnesota Valley National Wildlife Refuge. The County later decided not to appeal the Department of Natural Resources's decision. The Twin Cities Field Office and many other entities have opposed this road for 15 years as being unnecessary and causing substantial environmental harm. **5/98**

Sub-Basin Fishery Groups Unite Resources Under MICRA

Large River Fishery Coordination Office

The six major fish management groups within the Mississippi River Basin have agreed to serve on an Executive Board under the Mississippi Interstate Cooperative Resource Association (MICRA) to advance the science and management of interjurisdictional river fisheries within the 28 - state basin. The group met for the first time May 12-13, 1998, in St. Louis to lay the ground work for future cooperative efforts. This action will help to eliminate any confusion which may exist between the roles of the various groups, eliminate any duplication of effort lead to future partnerships in fishery resource management. **5/98**

Paddlefish-Sturgeon Concerns Subject of Service White Paper

Large River Fishery Coordination Office

A white paper voicing Service and States' concerns over potential use of paddlefish and native sturgeon species as surrogates in the caviar production industry was presented during the 54th annual meeting of the Upper Mississippi River Conservation Committee (UMRCC) held recently in Moline, Ill. Diminishing populations of European sturgeon species are putting pressure on domestic sturgeon to meet demand for caviar. The Service's role in new CITES (Convention on International Trade in Endangered Species) regulations were discussed as was the Mississippi Interstate Cooperative Resource Association's (MICRA) basin-wide paddlefish stock assessment. **5/98**

Service Represented at Catfish 2000 Workshop in Davenport, Iowa

Large River Fisheries Coordination Office

The Service's Large River Fishery Coordinator attended Catfish 2000 -- the 1st International Ictalurid Symposium held June 23-25, 1998, at the River Center in Davenport, Iowa. The symposium assembled scientists, biologists, resource managers, fishermen, and vendors of fishing equipment at a common forum to exchange information on ictalurid catfish and to further the interests of these important game fish. A workshop of resource managers and scientists met in conjunction with the symposium to identify strategies, and prioritize actions to improve North American catfish populations for the future. **6/98**

550 Miles of District Boundary Posting Underway

Fergus Falls Wetland Management District

Three Biological Technicians hired for the summer period have begun the process of re-posting over 550 miles of boundary around 217 Waterfowl Production Areas in the Fergus Falls Wetland Management District. Past shortages in maintenance funds have not allowed the district to maintain these boundaries and the crews efforts will result in better protection of these lands for nesting waterfowl. **6/98**

Ashland Fishery Surveys Lakes on Red Lake Indian Reservation

Ashland Fishery Resource Office

During the month of June, 1998, three inland lake surveys were conducted by the Ashland Fishery Resource Office on the Red Lake Indian Reservation. The first was a largemouth bass population estimate conducted on Fullers Lake. The project involved collecting bass and giving them a partial fin clip to identify them as part of this study. Two days later, after the first survey was completed, the crew conducted another night of electrofishing. Largemouth bass are once again collected from Fullers Lake and examined for previous fin clips. The result of the two assessments yields a set of data that can be used to establish a population estimate for largemouth bass. This information is used by Tribal biologist to better understand if catch restrictions are needed for this fishery. Two other fishery surveys were conducted on the Reservation (Morrison and Green Lake). The assessment of Green Lake was of special importance due to the decline of lake herring that was detected after the last survey. The catch results from this most recent survey were indeed encouraging because the data showed that lake herring are once again rebounding within this fishery. The Ashland Fishery Resource Office has been assisting the Red Lake Indian Reservation with inland fishery surveys for the past ten years. The information collected is used by Tribal resource managers to better understand the trend in which these fisheries are going so better management options can be selected. **6/98**

Agassiz Refuge Volunteer Appreciation Potluck Held

Agassiz National Wildlife Refuge

Beulah Wikstrom, Refuge office assistant, organized an evening of entertainment and good food to recognize the Agassiz Refuge volunteers. Ten volunteers enjoyed a potluck meal, a Minnesota comedian "Lars Pedersen," and Minnesota polka music. Volunteers currently on board include folks from New York, California, Michigan, Ohio, Maryland and Minnesota. Staff and families from Agassiz (and alumnae), and Minnesota Department of Natural Resources from Red Lake and Thief Lake Wildlife Management Areas, and the Karlstad office brought the gathering to about 40. Volunteers are working on wolf, moose, bittern and contaminant studies. Most spend at least three month terms. The affair was held at the Holt Community Center. **6/98**

Windom District Prescribe Burns 2,200 Acres to Improve Nesting Habitat

Windom Wetland Management District

Prescribed burning was used to stimulate native grasses and suppress invading exotic plants. This improves nesting habitat for ground nesting birds and stimulates native prairie plants to produce seed which is harvested and then used to re-establish native prairie habitat. Prescribed burning was completed on 15 Waterfowl Production Areas on Windom Wetland Management District for a total of 2,200 acres. **6/98**

New Bald Eagle Nest Makes Four for Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

A new bald eagle nest was discovered during aerial surveys. This brings the refuge total to four active nests. Five young eagles were produced from these nests. The Refuge locations and numbers of young eagles are as follows: North Wilderness, two; South Wilderness, one; Island, one; West Golden, one. None of the eaglets had fledged. **6/98**

Fergus Falls Wetland Managers Complete Prescribed Burnings for 1998

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District in cooperation with the Fergus Falls and Glenwood, Minn., Department of Natural Resources offices, recently completed prescribed burning on 31 separate tracts totaling 3,207 acres in the four-county district.

Prescribed burning enhanced numerous areas for waterfowl nesting, maintenance of native prairie and harvest of grass seed for future prairie restorations. The burns benefit more than 250 species of grassland birds as well as numerous native plants species. Partners included the Minnesota Department of Natural Resources and the Fergus Falls Fish and Game Club. **6/98**

Non-game Bird Survey Focuses on Grassland Birds

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District through a private contractor has initiated its 1998 grassland bird point counts on 14 native prairie sites throughout the Wetland Management District. These sites are owned by the Service, Minnesota Department of Natural Resources and The Nature Conservancy. Breeding bird species are documented and management efforts are directed toward enhancing species in decline. Species documented include bobolink, grasshopper sparrow and upland sandpiper. **6/98**

Native Grass Nesting Cover Re-established at Windom Wetland Management District

Windom Wetland Management District

Native grass and forb seed was planted to re-establish tall grass prairie habitat. An emphasis was placed on re-establishing diverse, locally adapted native plants for wildlife, especially for ground nesting birds. **6/98**

Sherburne Refuge Seeds 308 Acres to Prairie

Sherburne National Wildlife Refuge

Working with our partners a total of 314 acres of prairie/Oak Savanna understory were restored in 1998, 78 acres on private lands and 236 on refuge lands. A total of 3,564 pounds of native prairie seed was used with an open market value of approximately \$20 per pound. If purchased this seed would have cost \$71,280. Seed harvested at Big Stone National Wildlife Refuge and cleaned at Detroit Lakes Wetland Management District was used to help accomplish these restorations along with specific species of grasses and forbs purchased to enhance the seeding diversity. **6/98**

Restoration and Dedication of Maynard Reece Waterfowl Production Area

Union Slough National Wildlife Refuge

Maynard Reece, renowned wildlife artist and lifetime conservationist, was on hand for the dedication of the 314 acre Maynard Reece Waterfowl Production Area on June 20, 1998. Restoration of this area was completed in July, 1998 with the planting of 150 acres of tallgrass prairie. In 1997, 90 acres of prairie and 70 acres of pothole wetlands were restored. **6/98**

Draft Higgins' Eye Pearlymussel Recovery Plan Released

Twin Cities Field Office

The Technical Agency Draft of the Revised Higgins' eye pearlymussel recovery plan was released for 60-day review on June 22, 1998. Expert peers and a wide range of impacted and interested parties received copies of the document for comment. **6/98**

Native Seed Collected on Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge has started a native seed collecting program consisting of volunteers and staff. 30 volunteers have been divided into three teams, each covering a particular area of the refuge. Co-leaders are in charge of contacting the team members for scouting, identifying, mapping, observing, collecting and cleaning the plants and seeds. With the amount of area on the refuge, the volunteers have only been able to cover a small portion this season. **6/98**

Agassiz Celebrates International Migratory Bird Day

Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge held an International Migratory Bird Day celebration on Saturday, May 16, 1998 on the refuge. Events held included having the office open serving refreshments and goodies and giving away International Migratory Bird Day posters and Partners In Flight stickers. Six people stopped in the office. Refuge Operations Specialist Gary Tischer and local National Audubon Society member Jeanie Joppru led four people on a refuge birding tour from 9 - 11:30 a.m. From 1- 4 p.m. refuge Manager Margaret Anderson and Jeanie Joppru identified shorebirds for four people on Farmes Pool. **6/98**

Leafy Spurge Biocontrol Beetles Successful

Litchfield Wetland Management District

Leafy spurge beetles (*Aphthona lacertosa/A. czwalinae*) were released onto a native prairie Waterfowl Production Area in Kandiyohi, County, Minnesota. 1998 monitoring revealed high beetle numbers, good dispersal and lots of plant damage. From the release site, the beetles decimated the spurge in a circle nearly 30 feet across in one year and were found over 100 feet from the release post! **6/98**

Detroit Lakes Wetland Management District Restores 559 Acres to Prairie Grassland

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District restored 559 acres of old crop land into prairie grassland on nine Waterfowl Production Areas and two National Wildlife Refuges during 1998. Most of the seed was harvested from local Waterfowl Production Areas. and processed at the Detroit Lakes Wetland Management District seed processing facility. Some of the forb (wildflower) seed was purchased with funds donated by the Cormorant Lakes Sportsman's Club. Seventy acres were seeded by broadcasting the seed on snow covered areas during the winter months. **6/98**

AmeriCorps Team Works on Rydell National Wildlife Refuge

Detroit Lakes National Wildlife Refuge

Eleven AmeriCorps members worked on the Rydell National Wildlife Refuge for three weeks in May and June. They planted 300 basswood trees, stained a 300 foot boardwalk and overlook, built bluebird houses and wood duck boxes, conducted waterfowl surveys, landscaped around the visitor center, improved three miles of hiking trails, and many other miscellaneous tasks that benefitted the Refuge. Much of the funding for the trail, boardwalk, and visitor center projects came as a grant from the Minnesota State Legislature to improve accessibility of the public use facilities on the Refuge **6/98**

Pre-listing Recovery Project Funded for Dakota Skipper Butterfly

Twin Cities Field Office

The Dakota skipper, a small prairie butterfly, was the subject of a petition to list under the Endangered Species Act. The Service found listing to be not-warranted, but also believes pre-listing conservation must be undertaken to prevent future need to propose the species for listing. Funded Dakota skipper projects included work in all three states of its range (Minnesota, North Dakota, and South Dakota). Twin Cities Field Office is coordinating the effort that involves the Pierre and Bismarck field offices; Big Stone National Wildlife Refuge, Minn., N.D., and S.D. State natural resource agencies; and academic species experts. In Minnesota, the Department of Natural Resources was funded to develop management strategies and a management plan for the Dakota skipper population found at Big Stone National Wildlife Refuge. Refuge staff will be cooperating on the development of the plan and its subsequent implementation. Sites with known Dakota skippers have been provided to the Tallgrass Prairie Coordinator and Realty Ascertainment staff so they can be given high priority in tallgrass prairie acquisitions. **6/98**

Project Examines Management of Western Prairie Fringed Orchid

Twin Cities Field Office

The Twin Cities Field Office, in cooperation with the Minnesota Department of Natural Resources and The Nature Conservancy, is conducting a project to examine the response of western prairie fringed orchids to four experimental management regimes. The western prairie fringed orchid is a federally listed plant found in prairies of western Minnesota. The project will examine the plant's responses to: spring prescribed burn, every year; fall prescribed burn, every four years; annual mid-summer mowing; and annual fall mowing. Through the year 2001 we will receive annual reports detailing the experimental management and the vegetative response of the orchid. This study will improve our knowledge of how areas should be managed for the western prairie fringed orchid. **6/98**

Twin Cities Office Monitors Western Prairie Fringed Orchid

Twin Cities Field Office

The western prairie fringed orchid, a federally-listed plant, will be surveyed for flowering numbers and reproduction (new plants, seed production) at Blue Mounds State Park, Burnham Wildlife Management Area, Pembine Trail Preserve, and Crookston Prairie. Monitoring such as this enables us to keep track of the health of populations of federally-listed species. **6/98**

Twin Cities Field Office to Survey Prairie Bush Clover

Twin Cities Field Office

Prairie bush clover, a federally-listed plant, will be surveyed for flowering numbers and reproduction at Kilen Woods State Park. **V**

Public Use Facility Under Construction at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District has begun building a four-mile hiking, skiing and educational trail -overlook facility that will link the city of Detroit Lakes to Big Floyd Lake. The facility, which includes a deck and gazebo on the headquarters office and a boardwalk into the marsh, is expected to encourage at least 3,000 visitors to the facility each year. The trail will cross Minnesota Department of Natural Resources property and several tracts of private property. **7/98**

AmeriCorps Crew Completes Projects at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

An 11-member work crew from AmeriCorps in Denver, Colo., recently completed three weeks of construction at the Detroit Lakes, Minn., Wildlife Management District. While on the District, the crew removed a mile of old predator exclusion fencing, installed floor boards and applied sealer to the District office's deck, and built 215 feet of the headquarter's marsh boardwalk. The deck and boardwalk will eventually become part of a four-mile interpretive - recreational trail system that will allow people to hike and cross-country ski from the city limits of Detroit Lakes to Big Floyd Lake. An estimated 3,000 people will use the trail each year. **7/98**

City Youths, Public Hosted at Minnesota Valley National Wildlife Refuge Fishing Day

Minnesota Valley National Wildlife Refuge

More than 450 people, including 100 inner-city youths, recently learned fishing skills and ethics during a Pathways to Fishing Program at Minnesota Valley National Wildlife Refuge. The fishing day event, conducted annually since 1992, brought together 100 inner-city youths, and 350 other fishing enthusiasts to learn fishing skills and ethics. More than 80 volunteers and refuge staff helped teach participants how to use rods and reels, proper casting and knot tying techniques, safety and fishing ethics, fish identification, and more. The youths also participated in a casting contest run by the Burger Brothers Outdoor Outfitters and learned fish management techniques. Following a fish fry provided by the Red Lake Nation, participants spent time catching Largemouth Bass and Bluegill. Each youth received a fishing rod and reel and educational literature. In the afternoon the event was open for the first time to the general public with 350 people participating. Local families learned fishing techniques and practiced their skills at the Bass Ponds site. For many, it was their first fishing experience. **7/98**

Sixteen Moose Calves Captured and Collared

Agassiz National Wildlife Refuge

University of Idaho Ph.D. student, Eric Cox, captured 16 moose calves with the use of Minnesota Department of Natural Resources helicopter between May 9 and 25, 1998. Six calves were captured at Red Lake Wildlife Management Area (one has since died); six at Agassiz National Wildlife Refuge, one at Thief Lake Wildlife Management Area and five in the Viking Agricultural Area. Plans are to treat half of these animals with treatments to prevent brain worm, liver flukes and winter deer ticks and monitor survival to yearling stage. **7/98**

Dedication of Bob Hautman Project

Litchfield Wetland Management District

Bob Hautman of Plymouth, Minnesota, was the design artist of the 1997-98 Federal Duck Stamp. In July, 1997 the Service, the U. S. Postal Service, Minnesota Waterfowl Association, and the Lake Minnetonka Stamp Club sponsored a "Hometown Event" in honor of Mr. Hautman. Minnesota Waterfowl Association (MWA) sponsored a fund raiser in

conjunction with the event. Numerous private individuals and companies donated works of sporting art, memorabilia, and other valuable items which were sold through a silent auction. \$4,791 was raised through the MWA-sponsored auction and dedicated to a waterfowl habitat restoration project. MWA and Pheasants Forever donated an additional \$3,236 for the project. Matching funds were contributed by the Service. The Service's new 311-acre Lake Lillian Waterfowl Production Area in Kandiyohi County, Minn., was selected by Mr. Hautman and the Service as the site for applying the raised revenue for waterfowl habitat restoration. Forty-five acres of wetlands were restored on the tract in the Fall of 1997. In the Spring of 1998 61 acres of former crop lands were seeded to native prairie grasses and forbs. On May 1, 1998, a dedication of the "Bob Hautman Habitat Restoration Project" took place. Regional Director Bill Hartwig was the keynote speaker of the dedication. Other speakers included Mr. Hautman, other Service representatives, and local government officials. A highlight of the dedication was the unveiling of a brass plaque-cairn commemorating the project. **7/98**

Minnesota Junior Duck Stamp Ceremony Draws a Crowd

Minnesota Valley National Wildlife Refuge

The ceremony was held at the Minnesota School of Environmental Studies in Apple Valley, Minnesota. Approximately 430 guests were on hand to honor Minnesota's young winners. Rebecca Latham who placed second in the National Competition received special recognition. The winners received ribbons and awards. Among the many awards, the students received art supplies to encourage them in their artistic pursuits. Guest speakers include Nita Fuller, U.S. Fish and Wildlife Service and Warren Hanson, writer and illustrator. Diane Hedin, State Park Naturalist, provided a special program for the children called, "Song on the Wing." Visitors enjoyed both the Minnesota and National Junior Duck Stamp Exhibits. **7/98**

Northwest Minnesota Schools Receive Moose Books

Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge received a grant for the Moose Mystery Challenge which included funds for the Adopt-A-Moose program. A portion of those funds were to be used to purchase books on moose that would be donated to school libraries. Three titles were selected: "Moose for Kids;" "Moose Country;" and "Ecology and Management of the North American Moose." Nineteen elementary, middle and high schools in Thief River Falls, Hallock, and Warroad, Minn., received the books. Town libraries in Thief River Falls, Hallock, Warroad and Baudette received copies of "Moose for Kids" and "Moose Country." Book markers on the inside of the cover were designed to recognize the Adopt-A-Moose and Moose Mystery Challenge and included logos of the Service, Minnesota Department of Natural Resources and partners including the Hartz Foundation, Rice Area Sportsmen, and Wildlife Forever. **7/98**

Prescribed Burning Completed at Big Stone National Wildlife Refuge

Big Stone National Wildlife Refuge

Big Stone National Wildlife Refuge had a banner year for prescribed burning. Seventeen out of 23 units were burned for a total of 2,659 acres. These burns took place in Big Stone and Lac qui Parle Counties in April and May. **7/98**

More Than \$20,000 Shared with Towns in Wisconsin, Minnesota

Upper Mississippi River National Wildlife and Fish Refuge

Under the provisions of the Refuge Revenue Sharing Act, checks totaling more than \$20,600 were delivered to the treasurers of the City of LaCrosse, three towns in LaCrosse County, Wis., and Houston County, Minn. The Onalaska, Wis., board of supervisors voted to contribute the city's entire check of \$4,393 to the Upper Halfway Creek Marsh Project. This project will be built on the Refuge through a partnership involving the Service, Town of Onalaska, and others. **7/98**

Biological Control Agents Released to Control Canada Thistle

Agassiz National Wildlife Refuge

300 Shoot Gall Flies (*Urophora cardui*) and 300 Seed Head Weevils (*Larinus planus*) were released to two sites recently for control of Canada Thistle. 100 of each species were released in the Diversion Road area and 200 of each in the Farmes Pool area. Earlier, on May 6, 1998, 300 Stem Mining Weevils (*Ceutorhynchus litura*) were released. **7/98**

Breeding Bird Point Counts Completed at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

Breeding bird point counts were completed in the North Wilderness unit, South Wilderness unit and the Sedge Community. Winter wrens were confirmed nesting, merlins may be nesting. Stemless lady slippers were found and pitcher plants in great abundance in Whiskey Lake Area. **7/98**

Fergus Falls Wetland Management District Completes Biological Controls

Fergus Falls Wetland Management District

On June 23, 1998, staff from the Fergus Falls Wetland Management District traveled to Ward County, North Dakota and collected two species of insects for biological control of leafy spurge. Over a quarter of a million insects including two species, *Aphthona nigriscutis* and *Aphthona lancertosa* were collected and transplanted. Releases were made on nine Waterfowl Production Areas with heavy infestations of leafy spurge in Otter Tail, Grant and Douglas Counties. The insects feed on the spurge's stem and roots weakening the plant's capability to flower, produce seed and to spread to adjacent areas. Preliminary results from earlier releases have proven the technique to be successful. **7/98**

Gehl Family Descendants Visit Old Memories at Minnesota Valley Refuge

Minnesota Valley National Wildlife Refuge

A relationship was initially established with the Gehl family by Judie Miller when she led a joint Nature Conservancy Tour to the Rapids Lake Unit two years ago. At that time she met one of the Gehl family members who kept in contact by phone and letters. The Gehl family planned a family reunion for 1998 and requested a special tour of the Rapids Lake Unit to revisit the site of their heritage. The family was extremely interested in learning about the prairie and photographed the blooming prairie plants. They visited the site of the old farm house, and hiked to the Carver Rapids where they often went to picnic as children. They shared many family stories about their heritage and their memories of Carver. Their excitement has led them to offering to donate historical records and other items should the home site be restored. They also suggested that they might consider future financial contributions. **7/98**

Two Damaged Water-Control Structures Replaced at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

The East Pool and Dahl Pool water control structures were severely damaged in the 1997 floods. The old structures were removed and replaced with corrugated metal stop-log water control structures. This was accomplished under an 8-A Contract to Frontier Construction Company, Deer River, Minnesota. Construction began in the fall of 1997 and was completed spring 1998. **7/98**

Refuge Staff and Volunteers Band Canada Geese

Union Slough National Wildlife Refuge

This year's high rainfall across most of Iowa has left state biologists scrambling to reach their banding goals. When the water levels rise, the geese are able to move from wetland to wetland, making trapping and banding difficult. However, stable water levels at Union Slough National Wildlife Refuge were ideal for goose production in 1998, and made capturing the year's young much easier. With the help of the Kossuth County Conservation Board staff, Iowa Department of Natural Resources biologists, and Refuge volunteers 184 geese were captured and banded. **7/98**

Two American Bitterns Collared For Satellite Tracking

Agassiz National Wildlife Refuge

Two American bitterns were recently fitted with satellite-tracking collars to help the Service monitor the birds' migrations routes and behavior. The "collaring" effort is part of a seven-year study on American Bitterns. Very little is known about the life histories of American Bitterns, whose numbers are declining nationwide, and dramatically so in the mid-west. This is the first time satellite collars have been used on this species. Costs for the collars (\$3,000) and the platforms for data collection (\$1,000) were paid with grant funds from the State Conservation Partners Program and the Agassiz Audubon. Two more collars are scheduled to go on birds in Wisconsin. **7/98**

Cable Pipe Breaks While Crossing St. Croix River

Twin Cities Field Office

A video cable pipe being installed by Media One under the St. Croix River late last month broke through the substrate and had to be cut. Drilling muds could have been released when the pipe broke. The area is essential habitat for the federally endangered Higgins' Eye Pearly Mussel. Service biologist, Nick Rowse, through the Corps of Engineers, got the work stopped. He then conducted an informal consultation with Corps of Engineers staff, who had permitted the activity, and the company, to assess any damages to the river and the mussel bed. A dive survey was conducted on July 1, 1998, and found no damage to the mussel bed. Reboring was subsequently authorized by the Corps and completed on July 14. Pipe will be installed later. A follow up dive will be done later in the summer. **7/98**

Environmental Compliance Audit Conducted at Agassiz National Wildlife Refuge

Agassiz National Wildlife Refuge

Pat McDermott, Region 3 engineering office, and Terry Clayton, national coordinator of the audit program, Denver, Colo., conducted an on-site Environmental Compliance Audit July 14, 1998, for hazardous materials of all refuge buildings, grounds, facilities. One day was devoted to inspection and the second day to summary of findings and suggested corrective actions. **7/98**

Sherburne Refuge Produces 68,000 Beetles for Biocontrol of Exotic Plants

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge is acting as a rearing facility for two species of leaf-eating beetles which are biological control agents for the exotic plant, purple loosestrife which is overtaking our native wetland habitats. Over 68,000 beetles were reared in Fiscal Year 1998 and were released on 10 refuge sites to facilitate ecologically sound control measures on over 600 infested acres. Three of station sites were also treated with these insects. More than 200 volunteer hours were accumulated in aid of this project - used in the insectory setup, collection of beetles and monitoring efforts associated with this project. **7/98**

Grass Seeding Completed at Hamden Slough National Wildlife Refuge

Hamden Slough National Wildlife Refuge

A total of 174 upland acres were seeded to native grass on Hamden Slough National Wildlife Refuge. At the North Star 2000 development site, 147 acres were seeded. Tamarac National Wildlife Refuge provided a tractor and operator and Detroit Lakes Wetland Management District provided the drills. **7/98**

Agassiz Employee Shares Trapping Tips, Ethics at Pioneer Village

Agassiz National Wildlife Refuge

Dave Myhrer, engineering equipment operator, gave 20 minute presentations and demonstrations to 16 groups of youths, ages five to 11, on trapping history, methods, ethics, and fur bearer identification and food and habitat needs. Displays of various furs, traps and trapping equipment were available and demonstrations given. This occurred on July 22 and 23, 1998, at Pioneer Village in Thief River Falls, Minn. About 144 children and 16 adults participated. **7/98**

Refuge Programs Discussed on Local Radio Program

Agassiz National Wildlife Refuge

KTRF Radio, Thief River Falls, Minn., interviewed refuge staff July 9, 1998. The interviews covered nine topics: Refuge maintenance, water level management, farming, waterfowl nest success, gosling production, moose calf, Conservation Reserve Program initiatives, upcoming events including an August 16 Open House on wolves, and Waterfowl Banding opportunities for the public. **7/98**

Sherburne Refuge Reintroduces Extirpated Prickly Pear Cactus Plant

Sherburne National Wildlife Refuge

Prickly pear cactus (*Opuntia fragilis*), a member of the globally endangered Midwest Oak Savanna plant community the Refuge is restoring, and formerly extirpated from the Refuge, was reintroduced to the Refuge this summer. About 50 individual plants were transplanted in partnership with the Minnesota Department of Natural Resources. The plants were obtained from a remnant population in an adjacent state forest where its continued existence is threatened by an encroaching pine plantation. The transplants will be monitored for survivorship and health. **7/98**

Fishery Habitat Restoration Plans Being Developed

Large River Fisheries Coordination Office

The Large River Fisheries Coordinator, through his role as MICRA (Mississippi Interstate Cooperative Resource Association) coordinator-executive secretary, developed and won acceptance by MICRA a Federal Aid funding proposal for evaluating the North American Waterfowl Management Plan to assess the feasibility a similar program for fisheries in the Mississippi River Basin. The proposal also has tentative approval of the Service directorate and the International Association of Fish and Wildlife Agencies. This would tentatively begin a three-year effort during which time potential projects could be developed and partners identified. **7/98**

***Working with our partners
a total of 314 acres of prairie/
Oak Savanna understory
were restored in 1998, 78 acres
on private lands and
236 on refuge lands.
-Sherburne NWR FY 1998
Accomplishment***

Workshops Drafts Fishable Waters Act to Protect U.S. Waters

Large River Fisheries Coordination Office

The Large River Fisheries Coordinator Jerry Rasmussen, working through U.S. Fish and Wildlife Service Assistant Director Gary Edwards, worked with sponsors to develop language for a bill which is intended to enhance the protection of the nation's waters from non-point source pollution. The bill recommends establishment of interdisciplinary watershed councils to develop plans for reducing non-point source pollution runoff and improving the Nation's rivers for fish and fishing. It relies on incentive programs and willing landowners for implementation of measures to improve high quality as well as impaired waters. The focus, however, will be on protecting high quality waters first rather than polluted areas. Measures recommended for improving the Nation's waters include the following: in-stream modifications and structures; stream-side vegetation; modifications to flood control measures and structures to improve connection of rivers to low-lying areas such as backwaters, side channels, oxbows and tributary mouths; improvement of flood-plain management practices and flood control programs; improved stream flow control practices to stimulate more natural flow regimes; flood response and disaster-relief planning and measures that will preserve or improve habitat integrity in connection with decisions regarding flood response, cleanup, levee restoration, or other alternatives following future floods; and other appropriate techniques for the protection or improvement of fisheries habitat. **8/98**

Bottom Trawling Used in Red Lake Fishery Survey

Ashland Fishery Resource Office

Ashland Fishery Resource Office successfully used bottom trawling to assist the Red Lake Band of Chippewa in performing a fish community assessment in the Upper and Lower Red Lakes. This is the first time that Ashland Fishery Resource Office has used bottom trawling to assess a tribal fishery. The survey was prompted in order to determine the status of walleye recruitment in the wake of a declining walleye fishery and to determine the status of forage fish stocks for supporting walleye. Forty-five tows of 5-minute duration were completed during the week of August 10th with no obstructions encountered. No walleye were caught, but forage fish were very abundant. The

two most abundant species collected were yellow perch followed by spottail shiner. Other species collected included freshwater drum, emerald shiner, trout-perch, logperch, bluegill, largemouth bass, burbot, and lake whitefish. This information will be used to support an intensive walleye restoration plan consisting of restocking and more restrictive catch regulations. Pat Brown, tribal fisheries biologist, was pleased with the effectiveness and ease of this sampling method for replacing the much more labor intensive and time consuming seining method. **8/98**

Federal Services Partner to Survey Streams on Chippewa National Forest

Ashland Fishery Resource Office

The Ashland Fishery Resource Office recently conducted fishery assessments on several streams within the Chippewa National Forest. The objective of the sampling effort was to determine what fish species are found in small and medium-sized streams within these stream segments. In previous years, the U.S. Forest Service has utilized only minnow traps to determine fish species diversity within these streams. Chippewa National Forest Fishery Biologist Chantel Cook contacted Frank Stone of the Ashland Fishery Resource Office, to request Service assistance with additional fish collection using backpack electrofishing techniques. This would enable the U.S. Forest Service to verify both species composition and relative abundance. The Chippewa National Forest is in the process of testing an ecological classification system (Rosgen Stream Classification) of streams that lie within its borders. The information gained from these fishery surveys will be used by the Forest managers for planning and environmental analyses, and documenting environmental effects of forest management practices. **8/98**

Twin Cities Tree Trust Completes Public Use Projects

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge has partnered with Twin Cities Tree Trust for more than fifteen years to provide the labor for high priority public use projects. The organization is a non-profit whose objectives are to provide skills to disadvantaged youth through outdoor recreation public projects in Hennepin and Dakota counties within the Twin Cities metropolitan area. **8/98**

Minnesota Congressman Tours Black Rush Lake Project

Windom Wetland Management District

An on-site briefing was held for Congressman David Minge concerning the Black Rush Lake Restoration Project. Restoration plans, partner involvement and land exchange approval was discussed in detail. **8/98**

Detroit Lakes Wetland Management District Staff Booth at County Fair

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District staffed a booth in the Natural Resources Building at the Becker County Fair during the week of August 12-15, 1998. An estimated 15,000 people view the booth. Visitors received information about the Service, Wetland District management activities, wetland restoration opportunities, wildlife, and other natural resources topics. An estimated 15,000 people visited the Natural Resources Building during the four-day event. **8/98**

Friends of Rydell Refuge Host Third Annual Open House

Detroit Lakes Wetland Management District

On August 2, the third annual Rydell National Wildlife Refuge Open House was hosted by the Friends of the Rydell Refuge. Horse-drawn wagon tours, displays, door prize drawings, refreshments and games were provided to the more than 250 visitors who attended. An "All School Reunion" of Maple Grove District 190, a country school formerly located on the Refuge, was a major attraction for the Open House. The horse-drawn wagons transported visitors to the site of the school. Former school members entertained the crowd with stories, songs, photos and other memorabilia from the school. **8/98**

Church Groups Expand Maintenance Staff at Minnesota Valley Refuge

Minnesota Valley National Wildlife Refuge

Community Churches provided Minnesota Valley National Wildlife Refuge with extra hands three mornings a week. Five local churches brought supervised youth to the refuge throughout the entire summer to help maintenance staff catch up on projects. The groups painted, picked up litter, helped with tree cleanup after storms, cleared gutters and parking lots, and removed trees and exotic species. **8/98**

Congressman Collin Peterson Visits Fergus Falls Wetland Management District

Fergus Falls Wetland Management District

Congressman Collin Peterson toured the Prairie Wetlands Learning Center and spoke at the Grand Opening on August 8, 1998. In addition Mark J. Anderson, Senior Advisor and Josh Syrjamaki, Policy Liason staffers from Senator Paul Wellstone's office toured the Center and were given a briefing on the Wetland Management District's Environmental Education Programs.

10 Additional Bird Species Now Nesting at Hamden Slough

Hamden Slough National Wildlife Refuge

Summer-long census on Hamden Slough National Wildlife Refuge has verified the first confirmed nestings of 10 additional bird species on the refuge. Aaron Johnson, a biologist at the refuge, completed the census. Johnson confirmed nests of black tern, red-necked grebe, pied-billed grebe, American coot, ring-necked duck, ruddy duck, redhead, Brewer's blackbird, cliff swallow and eastern phoebe. Three of these species -- ruddy duck, redhead and Brewer's blackbird -- were also the first confirmed nesting by that species in Becker County, Minnesota, and were reported to the Minnesota Ornithological Union. Many of the new nests were discovered at three of the refuge's "big five" wetlands which were restored in 1995 using water control structures. **8/98**

Agreement Signed With Washington County Soil and Water Conservation District

Twin Cities Field Office

The Twin Cities Field Office and the Washington County (Minn.) Soil and Water Conservation District entered into an agreement to restore wetlands and riparian lands in Washington County. Up to \$5,000 of restoration activities will be funded for Fiscal Year 98-99. **8/98**

Franconia Proposes Water Intake in St. Croix River

Twin Cities Field Office

Franconia, Minnesota, has recently submitted an application to the Minnesota Department of Natural Resources to extend an intake pipe approximately 100 feet out into the substrate of the St. Croix River. The site is documented to have the winged mapleleaf and Higgins' eye pearly mussels, both of which are federally endangered. Twin Cities Field Office is working with the Minnesota Department of Natural Resources, U.S. Army Corps of Engineers, and the National Park Service to get Franconia to consider other alternatives which would supply adequate water for firefighting. Should Franconia apply to the Corps to construct the intake pipe, a formal Section 7 consultation would be required. **8/98**

Noxious Weed Control Completed on 43 Waterfowl Production Areas

Windom Wetland Management District

Exotic, noxious weeds were treated for eradication and prevention of seed production. In most cases state laws require treatment of these noxious weeds reduce plant species diversity which adversely affects wildlife. **8/98**

'Howling Good Time' at Agassiz National Wildlife Refuge August Open House

Agassiz National Wildlife Refuge

Two refuge personnel staffed the refuge office from 1 p.m. to 6:30 p.m. during the Refuge's August Open House. Wolf researcher Andreas Chavez presented a one and one-half hour talk on radio and non-radio collared wolves on and near the refuge at the refuge office. Later that evening, 32 attendees were taken out on the refuge to howl for wolves. Strong winds prevented any wolf howling responses. The wolf program was presented to inform the public about the last two years of wolf study on and near the refuge. The howling was done to let people hear a real wolf howl. **8/98**

Forty Seven Wetlands Restored at North Star 2000 Site

Hamden Slough National Wildlife Refuge

North Star 2000 will restore 220 wetlands and 965 acres of upland, on and near Hamden Slough National Wildlife Refuge. Phase I (Fiscal Year 1998) of the North Star project will restore 70 wetlands and 160 acres of native upland, surrounding Bisson Lake. Bisson Lake is the center and center piece of North Star 2000.

Forty-seven wetlands were restored in August, for a total of 62, during Fiscal Year 1998. Eight additional wetlands will be restored in September. A total of 187 acres of upland were seeded in July. **8/98**

Mille Lacs Band of Ojibway Harvest Wild Rice at Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

Using traditional harvest methods, members of the Mille Lacs Band of Ojibway harvested 50 pounds of wild rice from Buck Lake on Sherburne National Wildlife Refuge. The rice will be planted into Lake Onamia to restore the rice beds there. The harvest was part of an agreement with the Minnesota Department of Natural Resources and the Service. **9/98**

North Dakota Graduate Students Assist with Mallard Duck Banding

Hamden Slough National Wildlife Refuge

Eight graduate students from North Dakota State University assisted refuge personnel with mallard banding on Hamden Slough National Wildlife Refuge. One graduate student from Nepal found the experience to be a unique American opportunity. Additional volunteers included an NDSU's ornithology professor, and the Administrator of the Buffalo - Red River Watershed District. This was the first year for rocket netting on the refuge. Refuge personnel felt the experience would be an outstanding experience for nearby universities. A total of 260 mallards have been banded, after three nettings. **9/98**

Minnesota, Wisconsin Land Managers Tour Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge hosted a management tour for land managers on adjacent areas with oak-sand-tallgrass prairie on Sept. 2, 1998. A total of 37 people attended from Wisconsin and Minnesota Departments of Natural Resources, The Nature Conservancy, University of Minnesota, St. Cloud State University, Hennepin County Parks and St. John's University. The tour's objectives were to exchange management information and to provide initial peer review of the landscape plan. An excellent exchange of information occurred culminating with a turkey barbecue at the schoolhouse. **9/98**

750-Foot Accessible Hiking Trail Added to Wildlife Drive

Sherburne National Wildlife Refuge

Working with Refuge partners, Sherburne National Wildlife Refuge has established a 750-foot accessible trail. This asphalt trail is located near the start of the eight-mile-long Wildlife Drive and will provide access to the highest concentration of visitors on the refuge. The trail winds through a restored prairie-oak savanna complex and will eventually connect to a cedar deck overlooking a wetland. A prairie demonstration garden has already been planted and an orientation kiosk is being designed to greet visitors and provide valuable viewable wildlife information. **9/98**

Sherburne Refuge Manages Over 6,100 Acres of Wetlands

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge actively manages water in 24 wetland impoundments to provide a wetland complex for a variety of wetland dependent wildlife. Eight pools were drawn down and subsequently re-flooded: five this spring, two this summer, and one this fall; producing over 2,500 acres of wild rice and moist soil foods for migratory and production use by water birds. In addition, deep water habitat in the other 16 pools provided resting places as well as floating and submergent plants for those requiring deep water habitats and a healthy fishery capable of supporting five active pairs of the federally-threatened bald eagle. **9/98**

Sherburne-Crane Meadows Restore 417 Acres of Wetland Habitat

Sherburne National Wildlife Refuge

The Sherburne/Crane Meadows National Wildlife Refuge Complex completed 32 wetland restorations totaling 417 acres in fiscal year 1998. The majority of these restorations were in conjunction with other partners and included upland restoration projects funded through state, private and federal programs. **9/98**

Minnesota Waterfowl Association Assists in Wetland Restoration

Windom Wetland Management District

Construction of a water control structure and completion of a ditch clean-out enabled the de-watering and vegetation re-establishment of a 34-acre wetland located on the Iowa Waterfowl Production Area. The Minnesota Waterfowl Association contributed to this project. **9/98**

Public Duck Banding Evening Held at Agassiz National Wildlife Refuge

Agassiz Wetland Management District

Refuge staff personnel demonstrated duck rocket net catching, banding, aging and sexing techniques to 45 people participating in this annual refuge event. This event was held at one of the refuge's banding sites. This event is held to educate the public on banding and the information gained from people reporting birds found with bands to the U. S. Fish and Wildlife Service. **9/98**

University Student Volunteers 160 Hours to Assist Windom Wetland Management District

Windom Wetland Management District

South Dakota State University Wildlife Management student donates 160 hours to assist with management and office programs. **9/98**

Safe and Convenient WPA Parking Areas Constructed at Windom Wetland Management District

Windom Wetland Management District

Public use of Waterfowl Production Areas is encouraged. It is necessary to provide safe and convenient parking areas at the Waterfowl Production Areas.. Through the contributions of the Cottonwood County Game and Fish League seven parking areas were constructed on the Waterfowl Production Areas. **9/98**

Native Grass Seed Harvest at Windom Wetland Management District

Windom Wetland Management District

Local harvest of native grass and forb seed provides locally adapted seed at a significant cost savings to the government. This seed is used to re-establish native grass/forb habitat on new Waterfowl Production Areas and easement areas for the benefit of wildlife. **9/98**

Sherburne-Crane Meadows Complex Participates in Water Festival

Sherburne National Wildlife Refuge

Sherburne-Crane Meadows staff were four of 30 instructors from 10 agencies and schools who presented the Morrison County (Minnesota) Water Festival September 22 - 23, 1998, to 516 sixth grade students from the county. The event, coordinated by the Morrison County Water Plan staff, is annually held at Camp Ripley, near Little Falls, Minn. Participating schools were from Little Falls, Pierz, Royalton, Swanville, Upsala and Lourdes. Program topics included wetlands and wildlife, water purification, surface water quality, ground water quality, enviroscape, aquifers and macro invertebrates. **9/98**

North Star 2000 Partnership Restores 70 Wetlands at Hamden Slough Refuge

Hamden Slough National Wildlife Refuge

Phase One of North Star 2000, a partnership project involving Service, was completed recently on Hamden Slough National Wildlife Refuge in northeast Minnesota. North State 2000 will eventually restore 220 wetlands and 1,000 acres of upland around Bisson Lake, a 112 acre drained wetland and part of the Buffalo River watershed on the Refuge. The diversity of the partnerships, stakeholders, permits, funding, equipment and staffing required the project to be divided into three phases. During Fiscal Year 1998, Phase One restored 70 wetlands, covering 45 acres surrounding Bisson Lake. A total of 167 acres around the wetlands were seeded to native grass. An additional 5,000 cubic yards of fill and sediments were removed from the wetlands to enhance cattail management. This required intensive negotiations with the Buffalo - Red River Watershed District and the Red River Water Management Board, who were interested in the affect of surface and sub-surface water. **9/98**

Service Joins Elk River Students to Establish School Prairie

Sherburne National Wildlife Refuge

Students at Elk River High School recently teamed with the Service's Sherburne National Wildlife Refuge in an effort to establish a School Prairie at the new Zimmerman Middle School in Elk River, Minnesota. Working with Refuge staff, the high school students established a five acre prairie and green house. Native prairie forbs will be grown in the green house and used to supplement restoration efforts both on and

off the Refuge. A similar project is also underway at the Isanti Youth's Ranch. A green house has already been constructed where Refuge and Ranch personnel will be work with court- appointed youth to help restore our vanishing prairie/savanna landscape. **9/98**

Intern Program Helps Students Focus On Future, Resource

Sherburne National Wildlife Refuge

For the fifth summer in a row, the Sherburne/ Crane Meadows National Wildlife Refuge Complex has hosted a summer intern program. This summer one high school and four college students were selected to participate in the program. Students worked side by side with Refuge staff and gained valuable work experience and insight into future career opportunities. All four college students volunteered three days per week for twelve weeks, the high school student volunteered two days per week for six weeks. **9/98**

Rapids Lake Vegetation Monitoring Completed at Minnesota Valley

Minnesota Valley National Wildlife Refuge

Minnesota Valley National Wildlife Refuge staff and volunteers completed the baseline vegetation monitoring of the Rapids Lake Oak Savanna site. The site is a degraded oak savanna that has been invaded by cedar trees and is a good candidate for restoration. The baseline data and future monitoring efforts will help refuge management monitor the progress of restoration efforts. **9/98**

Sherburne Refuge Hosts Record Number of Sandhill Cranes

Sherburne National Wildlife Refuge

The Sherburne National Wildlife Refuge has emerged as a regionally important area for greater sandhill cranes. This fall, the refuge emerged as a prominent staging area, reporting a record 738 birds using it as a feeding and roost area during migration. This number is a dramatic increase from the first 25 birds recorded staging at the Refuge in 1986. Nesting has also increased dramatically from one pair in 1975 to the current 30 nesting pairs. Surveys are performed in cooperation with St. Cloud State University, which uses the Refuge for an outdoor classroom for its wildlife management courses. The annual spring unison call survey, used to locate breeding pairs, also included partnerships with a local reporter, Princeton High School and regular Refuge volunteers. **9/98**

1998 Fire Effect Monitoring Ends; 17 New Plant Species Found on Sherburne Refuge

Sherburne National Wildlife Refuge Fire Effects Monitoring program began in 1993 with the establishment of the National Park Service protocol for monitoring the effects of fire on vegetation and substrates. Three strata are monitored at the Refuge: Dry Oak Forest, Oak Savanna, and re-established prairie grasslands. Plots are inventoried pre-burn and following a burn at intervals of 1,2,3,5, and 10 years. Variables measured to statistically significant levels include relative cover of native grass, native forbs and native brush, and basal area of native over story trees. A total of 95 plots have been established. In 1998, 15 new plots were established in Dry Oak Forest, and 3 plots were revisited. In Oak Savanna, seven new plots were established and eight plots were revisited. In Grasslands, five new plots were established and 14 plots were revisited. Species of plants not recorded previously at Sherburne National Wildlife Refuge are encountered by the monitoring regularly. This season, new finds include: *Osmorhiza Claytonii*, hairy sweet cicely *Ostrya virginiana*, Iron-wood Medicago lupulina, black medic, hop clover *Cenarurea biebersteinii*, spotted knapweed *Cystopteris fragilis*, fragile fern *Eriogonum annuum*, umbrella plant, annual buckwheat *Linum rigidum*, stiffstem flax *Lycopodium complanatum*, groundcedar *Oryzopsis pungens*, mountain ricegrass *Paspalum setaceum*, bead grass *Strophostyles leiosperma*, woolly bean *Dichanthelium sabulorum*, American panic-grass *Agrostis heymanis*, tickly grass *Salvia reflexa*, lance-leaved sage *Liatris punctata*, dotted blazing-star *Liatris cylindraceae*, cylindric blazing star *Coeloglossum viride*, long-bracted orchis. Some of these species, such as *Coeloglossum viride*, have never been found before in the county. Others interestingly have only been found at Sherburne. Sherburne's plant list has not reached 750 species with these additions. Following the field season, data collected is entered into a database and an annual report covering program status and data analysis is completed by the fire management officer. **9/98**

.Prairie Restoration, Photography Part of Tamarac National Wildlife Refuge Fall Open House

Tamarac National Wildlife Refuge

Talks were given by Jim Johansen of Prairie Restorations (how to create a prairie) and

Dominique Braud, wildlife photographer (tips on getting good wildlife photographs).

Demonstrations on processing wild rice, birch bark and sweet grass crafts were given by White Earth Tribal members, Earl and Kathy Hoagland and Genevieve Pablona. A demonstration of pine needle basketry and rustic birdhouses was given by July and Miles Kohont. Refreshments were also offered throughout the day. **9/98**

Externship for Educators Program Visits Litchfield

Litchfield Wetland Management District

"Externship for Educators," is a new program designed to help students learn what schooling, experience and job skills they need to acquire to get the jobs they want. Teachers interview professionals to learn how they achieved their positions and, using this knowledge, make changes in what or how they teach to better prepare students for the real world. Belgrade High School teacher Chad Peterson spent two days in the field with Refuge Operations Specialist Craig Lee learning how to get a job with the Service while assisting with spurge beetle monitoring and predator scent post surveys. **9/98**

Detroit Lakes Wetland Management District Restores 23 Wetlands on Private Land

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District restored a total of 23 wetland basins during 1998. These wetlands will eventually provide 28 more acres of water for nesting ducks when the basins fill up in the spring. **9/98**

Detroit Lakes Wetland Management District Hosts Waterfowl Expo

Detroit Lakes Wetland Management District

The Detroit Lakes Wetland Management District hosted its first Waterfowl Expo on the morning of September 12, 1998. Over 75 visitors participated in the youth duck calling contest, range estimation, waterfowl identification, retriever demonstrations, and steel shot patterning. In addition, visitors enjoyed the decoy carving demonstrations, antique decoy display and the 4-H food booth. **9/98**

Unique Refuge Partnership Helps Troubled Teens Learn 'Big Bs'

Hamden Slough National Wildlife Refuge

A unique partnership of Service National Wildlife Refuges and local groups recently completed its seventh year of working with troubled teenagers in northwest Minnesota. The Big "B" Program is used to motivate and teach teens enrolled at the Spring Hill Group Home through its motto: "Building refuges, Benefitting communities, and Bettering lives." In 1998, 15 teens volunteered 575 hours on Tamarac and Hamden Slough National Wildlife Refuges, Maplewood and Glendalough State Parks in Minnesota, the new Prairie Wetlands Learning Center and the Cities of Vergas and Lake Park, Minnesota. The summer program is funded by the State of Minnesota, and allows teens to work in a positive, supervised environment. **9/98**

Detroit Lakes Wetland Management District Harvests Prairie Seed Worth \$2 Million

Detroit Lakes Wetland Management District

The U.S. Fish and Wildlife Service, in cooperation with the Minnesota Department of Natural Resources, Hamden Slough National Wildlife Refuge, Devil's Lake Wetland Management District, private landowners, and several volunteers, an estimated 25,000 pounds of native grass and forb seed were harvested by the Detroit Lakes Wetland Management District during August and September 1998. The seed has an estimated value of \$2 million because of the amount and diversity of forb seed present. The seed will be used to seed 1,000 acres of old crop land into wildlife nesting habitat on public and private property during 1999. **9/98**

Refuge's Environmental Education Days Hosts 800 Students

Sherburne National Wildlife Refuge

Sherburne National Wildlife Refuge and Sand Dunes State Forest were joint host sites for the annual Environmental Education Days attended by 805 fifth grade students and 65 chaperones from 11 schools in Sherburne County on September 14-17, 1998. The event was coordinated cooperatively by Sherburne National Wildlife Refuge, the University of Minnesota Extension, Minnesota Department of Natural Resources-Forestry, and the Natural Resource Conservation Service. Refuge staff taught programs on Wildlife Management-the Bald Eagle, and Friendly Fire. Topics covered

by the other agencies included forest management, soils, ground water, water usage and wetland values. **9/98**

Detroit Lakes Wetland Management District Prescribe Burns 8,924 Acres

Detroit Lakes Wetland Management District

The Service recently completed prescribed burnings on a total of 8,924 acres of grasslands on 36 Waterfowl Production Areas scattered throughout four counties in northwestern Minnesota. The burns, conducted by the Service's Detroit Lakes Wetland Management District, ranged in size from four to 1,280 acres, and included more than 91 miles of fire line that needed control. Twenty-one private landowners cooperated with the Service by permitting their grasslands to be burned or allowing the burn crews to make fire lines on their property. The prairie grasslands were burned to enhance nesting habitat, prepare certain areas for seed harvest, and set back areas of encroaching woody vegetation. The burns occurred in the Minnesota counties of Becker, Clay, Mahnomen and Polk. **9/98**

Ducks Unlimited Helps Restore 14 Acre Wetland at Detroit Lakes District

Detroit Lakes Wetland Management District

Ducks Unlimited funded and supervised the construction of a water control structure that restored a 14.4 acre drained wetland on the Sieh Waterfowl Production Area in the Detroit Lakes Wetland Management District. The wetland will be filled with water next spring, complimenting other wetlands on the Waterfowl Production Areas by providing habitat for nesting waterfowl and resident wildlife. **9/98**

A total of 748.4 acres of land was purchased during Fiscal Year 1998 for the Detroit Lakes Wetland Management District's Waterfowl Production Areas.

\$26.9 Million Refuge Mitigation Package Approved

Minnesota Valley National Wildlife Refuge

On September 21, 1998, The Metropolitan Airports Commission overseeing the Minneapolis-St. Paul International Airport gave final approval of a \$26.9 million mitigation package to compensate the Service for impacts a new airport runway would have on the nearby Minnesota Valley National Wildlife Refuge. The agreement includes a minimum of \$20 million cash and additional compensation of up to \$6.9 million to relocate refuge facilities and to defray increased operational costs. The agreement caps more than two years of negotiations between Service officials and representatives from MAC and the Federal Aviation Administration. Service officials had initially requested \$26.9 million to replace an estimated 4,000 acres of refuge land and related programs and facilities. Final negotiations are expected to conclude within 60 days. **9/98**

784.4 Acres Acquired For Waterfowl Production Areas at Detroit Lakes

Detroit Lakes Wetland Management District

A total of 784.4 acres of land was purchased during Fiscal Year 1998 for the Detroit Lakes Wetland Management District's Waterfowl Production Areas. The wetlands will be restored and the uplands seeded into prairie grasses and forbs to provide nesting habitat for waterfowl and other ground nesting birds. Many other birds and resident wildlife will also benefit from this expanded habitat base. Since the areas will be open to hunting, trapping, wildlife observation, and other public use activities, the public will also directly benefit from the expanded opportunities available on these new Waterfowl Production Areas. **9/98**

Partner-Funded Nature Programs Presented to 355 at Rydell National Wildlife Refuge

Detroit Lakes Wetland Management District

With funding from the Maple Lake Improvement Association and the Union Lake Sarah Improvement Association and hosting by the Friends of the Rydell Refuge, six nature programs were presented at the Rydell National Wildlife Refuge during the year. More than 355 people learned about bats, dog sledding, prairie song birds, reptiles and amphibians, natural fabric dying, and butterflies. In addition the participants also were exposed to displays about the Fish and Wildlife Service and the Rydell National Wildlife Refuge. **9/98**

Two Detroit Lakes District Staffers Recognized for Life-Saving Efforts

Detroit Lakes Wetland Management District

On May 7, 1998, Tractor Operator Dave Davis and Forestry Tech. Jay Cucci were driving to Moose Lake, Minnesota, when they narrowly avoided being struck by an oncoming car which crossed into their lane. The car struck a truck that was traveling immediately behind them on the highway. Davis and Cucci summoned emergency assistance by calling 911, rendered first aid to both drivers and extinguished two fires that were started from the crash. Dave and Jay were given Exemplary Act Awards from Service Director Jamie Rappaport Clark for their efforts, which were above and beyond the call of duty. **9/98**

1998 Predator Scent Post Surveys Completed

Litchfield Wetland Management District

Litchfield Wetland Management District assisted the Minnesota Department of Natural Resources with predator scent post surveys for the 15th year in Meeker and Kandiyohi counties. The same 11 routes of 10 stations (110 stations) were again completed by Wetland Management District staff and volunteers. Stations of soft sand and a scent disc are constructed at one-third mile intervals and any tracks left are keyed out the next day. Data is collected statewide and is analyzed annually, providing estimates on the rise, fall and range changes of mammalian predators and other incidental species. **9/98**

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Agassiz Hosts Open House Day for National Wildlife Refuge Week

Agassiz National Wildlife Refuge

Four staff members were available to the public celebrating National Wildlife Refuge Week during Agassiz National Wildlife Refuge's "Waterfowl Extravaganza" open house on Sunday, September 27, 1998. Two videos, "1998 U. S. Fish and Wildlife Service and Canadian Wildlife Service Waterfowl Breeding Survey and Fall Flight Forecast," and the 1998 Ducks Unlimited - produced "Snow Goose Peril," were shown continuously throughout the day.. Two refuge-staffed guided bus tours were also given, where many ducks, Canada geese, sandhill cranes and other wildlife were observed. Seventy-five people attended the open house with 55 of the people taking the guided bus tours. Donuts, cookies and refreshments were served during the event. The open house educated people about the refuge, management practices and the connection between all national wildlife refuges. National Wildlife Refuge Week 1998 posters, National Wildlife Refuge tatoos, book marks, folders, and maps, and 1998 Wolf Awareness posters were given away during the celebration. **9/98**

Fergus Falls Wetland Management District Restores 200 Acres of Wetlands

Fergus Falls Wetland Management District

Over 70 wetlands have been restored in Otter Tail, Grant and Douglas Counties by the Fergus Falls Wetland Management District under the Private Lands Program. The wetlands were either restored by the Service or by other agencies or groups with the Service providing technical assistance. **9/98**

New Signs Added to Mark Boundaries, Inform Hunters at Fergus Falls

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District completed phase I of its major boundary marking project. Staff from the station spent three months posting more than 100 miles of boundary on 47 Waterfowl Production Areas. In addition, more than 120 parking lots were posted with signs informing hunters of the new nontoxic shot requirements for those using the Waterfowl Production Areas. This project required replacing 868 posts and 1,167 signs over the five county Wetland Management District. **9/98**

Exotic Plant Species Controlled on 50 Fergus Falls Waterfowl Production Areas

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District controlled 2,800 acres of exotic plant species including leafy spurge, plumeless and Canada thistle as well as spotted napweed on over 50 Waterfowl Production Areas. Control effort include mowing, biological controls (insects) and herbicides. These efforts are directed at exotic species invading native prairie or native grass restorations in an effort to maintain the health and diversity of these grasslands. **9/98**

Wildlife Inventoried at Fergus Falls Wetland Management District

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District completed a variety of wildlife surveys and censuses during 1998. These include the four square mile pair counts which gives and indication of district-wide waterfowl populations, the scent post surveys to show the presence and abundance of predator populations, prairie chicken booming ground counts to monitor the number of breeding mails and frog surveys to locate deformed frogs on Waterfowl Production Areas. **9/98**

Wetland Drawdown Program Enhances Waterfowl Brood Habitat

Fergus Falls Wetland Management District

Eleven wetlands totaling 450 acres at the Fergus Falls Wetland Management District have been placed in drawdown to enhance their value for breeding waterfowl. In addition, four water control structures have been replaced and one outlet channel cleaned to enhance water management on 375 acres of wetlands for waterfowl. When wetlands are placed in drawdown nutrients are recycled and emergent vegetation grows creating ideal brood habitat for a variety of water birds. **9/98**

275 Acres of Native Grasslands Restored Across Five-County District

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District staff seeded 275 acres of native grass on Waterfowl Production Areas, Wildlife Management Areas and Reinvest in Minnesota (RIM) agreements across the five-county area. In addition private lands staff assisted Natural Resources Conservation Service and private land owners with recommendations for native grass seeding on over a 1,000 acres in the same area. Grass was harvested from native prairies within the Wetland Management District, cleaned and mixed with purchased seed to seed these acres. Intensive management of this cover will result in excellent waterfowl and non-game bird nesting habitat. **9/98**

Habitat-Saving Parking Lots Completed

Fergus Falls Wetland Management District

The Fergus Falls Wetland Management District installed 12 parking lots on 12 Waterfowl Production Areas throughout the five-county District. The parking lots eliminate unsafe roadside parking for the public using the WPAs for hunting, wildlife observation and other public uses. These parking lots also prevent destruction of valuable nesting habitat as well as a site for information and interpretation about the WPAs. **9/98**

Wetland, Upland Acreage Designated for Acquisition

Fergus Falls Wetland Management District

Biologists from the Fergus Falls Wetland Management District prepared delineations for 260 acres of fee title and 1,280 acres of easement lands for acquisition under the Small Wetlands Program. Delineations are based on the biological value of these tracts to nesting waterfowl as well as other valuable natural communities. **9/98**

Service Joins Partners to Promote Minnesota Birding Corridor

Detroit Lakes Wetland Management District

A coalition of five Minnesota communities, six facilities operated by the Service; Minnesota Department of Natural Resources and the Lakes Area Birding Club have joined together to promote birding activities in northwestern Minnesota. A color brochure will be produced in the near future to highlight the best birding opportunities available along a 230 mile corridor that runs from the Minnesota communities of

Fergus Falls, in the south to Warroad, in the north. The brochure will enable both avid and novice bird watchers to more readily find birding hot spots in northwestern Minnesota and help communities become more "birder friendly" as they promote their communities. **9/98**

Volunteers Donate 3,381 Hours at Detroit Lakes Wetland Management District

Detroit Lakes Wetland Management District

Seventy-seven volunteers contributed a total of 3,381 hours to the Detroit Lakes Wetland Management District program in Fiscal Year 1998. Volunteers worked on waterfowl surveys, wetland and upland restorations, prescribed burning preparation, Waterfowl Production Area boundary posting, outreach, and construction of public use facilities. Several of these projects would not have been possible without the assistance of volunteers. Volunteers contributes an estimated \$33,810 worth of labor to the Detroit Lakes Wetland Management District during the year. **9/98**

Switchgrass Seed Harvest Exceeds Expectations

Litchfield Wetland Management District

Due to a high demand for Switchgrass (*Panicum virgatum*), seed prices have skyrocketed. To keep grassland restoration prices down, Litchfield Wetland Management District harvested seed on two burned fields totaling 40 acres. The yield was extremely good with nearly 20,000 pounds of bulk seed harvested. Cleaned, we expect 15,000 pounds at 75 percent or more of pure live seed (PLS). Switchgrass is currently selling for around \$10 per pound PLS. **9/98**

Volunteers Work 3,551 Hours on Rydell National Wildlife Refuge

Rydell National Wildlife Refuge

Ninty-seven volunteers contributed a total of 3,551 hours to Rydell National Wildlife Refuge programs during Fiscal Year 1998. They assisted with waterfowl surveys, upland habitat restoration, nesting structure construction and maintenance, a deer hunt for people with disabilities, a youth deer hunt, public use facility construction, special events, outreach, and general administration. Many of these projects would not have been possible without the help of dedicated volunteers. **9/98**

Black Rush Lake Restoration Project Approved

Windom Wetland Management District

Funding and approval was recently finalized for the restoration of the 980 acre Black Rush Lake Waterfowl Production Area. This project will result in the restoration of the drained, 357 acre Black Rush Lake basin and surrounding upland nesting habitat. Eleven organizations have cooperated in funding this project. Resulting benefits include public recreation, flood water retention, improved water quality and wildlife habitat. **9/98**

Wildlife Stewardship Award Presented to Dr. Scott Kuecker, Ducks Unlimited

Windom Wetland Management District

The Windom Wetland Management District presented its annual Wildlife Stewardship Award to Dr. Scott Kuecker for his dedication and leadership in establishing the Black Rush Lake Waterfowl Production Area. Dr. Kuecker raised necessary funding to complete a key land exchange, essential for the restoration of the 357 acre drained Black Rush Lake basin. He also worked with his congressional representative and aids to obtain timely approval for this land exchange. Dr. Kuecker is president-elect of the Marshall Chapter of Ducks Unlimited. **9/98**

Upland Habitat Restored on 656 Acres on Private Land

Windom Wetland Management District

Locally adapted native grass was planted to restore upland habitat on private land at 29 sites for a total of 656 acres. **9/98**

300 Wetland Acres Restored on Private Lands

Windom Wetland Management District

45 wetlands totaling 303 acres were restored on private lands through the Partners for Wildlife Program. **9/98**

Conservation Clubs Assists in Purchase of Waterfowl Production Area

Windom Wetland Management District

Two local conservation clubs, Pheasants Forever and Cottonwood County Game and Fish League, provided funding to rent and extend a purchase agreement for a 160-acre tract, which enabled the Service to acquire the property as a Waterfowl Production Area. **9/98**

\$50,000 Grant Awarded for Black Rush Lake Restoration

Windom Wetland Management District

A North American Wetlands Conservation Act Grant of \$50,000 was awarded to the Windom Wetland Management District for the development of the Black Rush Lake Restoration Project. Native grass habitat will be re-established on 570 acres in 1999. **9/98**

Windom Wetland Management District Hosts Grassland Management Workshop

Windom Wetland Management District

Windom Wetland Management District hosted a Native Grass/Forb Management Workshop. The purpose was to assemble land managers to share field experience concerning native grass seed harvest, planting and weed control to preserve forb diversity. Land Managers from four Department of Natural Resources offices and two Service offices attended. **9/98**

Report Describes Resources, Problems and Objectives for Grand Forks Flood Project

Twin Cities Field Office

The Service has completed its final Fish and Wildlife Coordination Act Report for the Grand Forks, North Dakota, and East Grand Forks, Minnesota, Long Term Flood Abatement Project. The report describes the existing resources in the project area of the Red River of the North; identifies problems, needs and management objectives for the area's biological resources; provides input into the development of the project design; and makes recommendations to preserve, restore, or enhance environmental resources. The preferred alternative includes setback levees with a green way between them that will provide flood protection to the residents of Greater Grand Forks while minimize impacts to natural resources. **9/98**

Expansion of Flying Cloud Airport Proposed, Refuge Monitoring Noise Levels

Twin Cities Field Office

The Metropolitan Airports Commission is proposing to expand the dual parallel runways at the Flying Cloud Airport in Hennepin County to handle larger business jet aircraft. This expansion will allow larger, noisier aircraft to use the airport, resulting in a Section 4(f) constructive use of the Upgrala/Wilkie units of Minnesota Valley National Wildlife Refuge. The Twin Cities Field Office and the Refuge recently recommended a noise monitoring station be set up to sample ambient noise for a four-week period. The Refuge and Twin Cities Field Office will be participating in a committee set up by MAC that includes local land and government interests that will address the noise issue. **9/98**

Storm water Management Issues at Minnesota Valley National Wildlife Refuge

Twin Cities Field Office

The Twin Cities Ecological Services Field Office is assisting Minnesota Valley National Wildlife Refuge is addressing storm water management issues in the Refuge's Long Meadow Lake Unit. Previous environmental contaminant investigations documented toxic pollutants in Long Meadow Lake and upstream storm water detention basins. Spills and runoff from highly developed urban land use represent a continued problem for the refuge in this area. The Service has initiated an effort with local public officials and others in a partnership approach to hopefully re-design and retrofit existing storm water management techniques to enhance water quality and refuge resources. **9/98**

164. Minnesota Wolf Management Roundtable Reaches Consensus

Twin Cities Field Office

The Minnesota Wolf Management Roundtable recently reached a consensus on issues to be addressed by the Minnesota Department of Natural Resources in developing its state's wolf management plan. Based on the consensus, Minnesota will be able to write a plan that allows the Service a stronger argument for delisting. The Minnesota Wolf Management Roundtable consists of 34 voting members, 20 non-voting advisors and roughly 12 citizen observers. Paul Burke of the Service's Twin Cities Field Office served as the Service's advisor to the Roundtable. As part of a four-step process, the Roundtable conducted a

series of 12 public meetings which precede the drafting of the state wolf management plan by Department of Natural Resources staff. Following public and interagency review, the plan will be presented to the state legislature for mark-up and final approval. Consensus was reached on the following issues: No sport season will be included in the plan. With carefully crafted rules, landowners will be allowed to shoot wolves caught in the act of depredation. Animal Damage Control (ADC) will continue under about the same restrictions, with the exception that "nuisance wolves" will now be subject to ADC action. Research will be conducted on nonlethal control measures. Compensation will be enhanced. Enforcement will be enhanced. Monitoring will be required at regular intervals. If the Minnesota wolf population drops to 1,600 animals, strict rules will be enforced to recover the population. There will be no geographic restriction for wolf range. There will be no restriction on wolf population size. The Roundtable will reconvene annually and at five years to reevaluate the efficacy of a sport season. Roundtable membership included representatives from Minnesota Tribes, conservation organizations, Minnesota Department of Natural Resources, user groups, private citizens and other government agencies. **9/98**

Twin Cities Field Office Team to Analyze Human-Caused Wolf Mortality

Twin Cities Field Office

The Service's Twin Cities Field Office has assembled a team to analyze 30 years worth of research data relating to human-caused wolf mortality in Minnesota. The team will analyze mortality data to formulate an estimate of future human-caused wolf mortality in Minnesota, where most of the nation's gray wolves are found. The four member team consists of Paul Burke, a Service biologist; Dr. Todd Fuller, research biologist and professor at the University of Massachusetts; Jean Cochrane, research biologist (former Service biologist) and Neal Darlow, a Service student intern. The team will employ meta-analysis or multiple regression analysis methods to accurately capture and analyze mortality data. The study should be completed by January, 1999, and will become a component of the Service's proposal to remove the gray wolf from the Endangered Species List. **9/98**

\$4.2 Million Wetlands Conservation Grants Approved for Service Partners

Joint Venture Office

The Migratory Bird Conservation Commission recently approved five North American Wetlands Conservation Act (NAWCA) grants for five projects within Region 3, Service. The grants total \$4,239,593 and will be used to help Service partners acquire, restore and/or enhance 32,500 acres of wetlands and associated upland habitats in Missouri, Minnesota, Wisconsin and Indiana. The Four River II wetland project will improve over 9,000 acres in the Osage River basin of Missouri. The Heron Lake IV project will continue restoration work in that Minnesota watershed. The Wisconsin Coastal Initiative II will restore wetlands in 13 counties in southeast Wisconsin. The Superior Coastal project will protect Lake Superior wetlands in northern Wisconsin. The Grand Kankakee III restoration project continues acquisition and restoration work in the Kankakee watershed of northwest Indiana. Partners in the projects include Missouri Department of Conservation, Ducks Unlimited; the Minnesota, Wisconsin and Indiana Departments of Natural Resources, Bad River Band of Chippewa Indians, The Nature Conservancy and Indiana Heritage Trust. The Service's Region 3 consists of the States of Minnesota, Wisconsin, Michigan, Ohio, Illinois, Indiana, Missouri and Iowa. **9/98**

Service Co-Authors Present Paddlefish Study Findings to American Fisheries Society

Carterville Fishery Resource Office

Greg Conover, and Joanne Grady of the Service's Carterville Fisheries Resource Office delivered preliminary findings of a two-year paddlefish study at a meeting of the American Fisheries Society in Hartford, Connecticut. The paper, co-authored by researchers from Tennessee Technological University, provided findings of a two-year study of paddlefish sponsored by the Mississippi Interstate Cooperative Resource Agency (MICRA.) The paper describes results of MICRA's large-scale, tag-and-release study initiated in 1995. Information gathered during the 22-state effort is maintained in a database by the Service. Paddlefish have been an important fisheries resource in North America since the late 1800s. With increasing demands for paddlefish, improved capture efficiencies, and alterations of critical spawning habitats, paddlefish populations have declined in many locales and

been extirpated in several areas. The contribution of hatchery paddlefish to the wild populations are becoming apparent as stocked fish recruit to commercial and recreational fisheries throughout the basin. Since MICRA's inception in 1995, cooperators have tagged and released over 400,000 juvenile hatchery paddlefish. Over 4,200 adult wild paddlefish have also been tagged and released with unique sequential codes. Sampling by field biologists and examinations of commercial catches have yielded data on 444 tagged paddlefish. Most (72-percent) of these recaptures were hatchery fish that had been tagged and released prior to 1995. The contribution of hatchery paddlefish to the wild populations are becoming apparent as stocked fish recruit to commercial and recreational fisheries throughout the basin. Preliminary results indicate that effective management of paddlefish will require the cooperation of many state agencies responsible for managing this important resource. **9/98**

Service Establishes Data Processing Center For MICRA Paddlefish Study

Carterville Fishery Resource Office

The Service coordinates and manages a basin-wide paddlefish coded wire tagging project initiated by the Mississippi Interstate Cooperative Resource Association (MICRA). The Service established a coded-wire tag data processing center, with operations at two locations in Region 3, to work with the 22 participating MICRA-member states and other cooperating agencies. The center provides crucial coordination and a stable base of technical support to the project's participants. The scope of and demand for these services has already expanded. In addition to supporting project coordination, in Fiscal Year 1998, we processed an estimated 5,000 sequentially coded wire reference tags for wild captured paddlefish, reference tags for 150,000 hatchery reared paddlefish, 300 recovered coded-wire tags from recaptured paddlefish, incoming data for over 200 field sampling trips made by biologists in 19 states, incoming data for 30 hatchery stockings in 6 states, and incoming data from commercial and recreational fisheries. All data are stored in a database for annual analysis and report preparation. The coded wire tagging center generates data summary reports for each participating state or agency, as well as a consolidated annual report for MICRA. **9/98**

Habitat Needs Assessment at Rock Island

Rock Island Field Office

Rock Island Field Office staff maintained interagency momentum on the development of a habitat needs assessment for the Environmental Management Program (EMP). Information was gathered from other U.S. eco-regional assessments and disseminated to the interagency group for use in developing study plans. Field Office staff organized and/or assisted in several interagency meetings, developed project review drafts, and currently co-chairs this activity with the U.S. Army Corps of Engineers. **9/98**

Partners In Flight Publishes First Bird Conservation Plan

Joint Venture Office

In August 1998, Partners In Flight published its very first Bird Conservation Plan. This plan, completed with assistance from the Joint Venture Office and Regional Non-game Bird Coordinator, covers the Northern Tallgrass Prairie physiographic region. This non-game bird plan will be an excellent tool for partner groups who deliver habitat conservation projects, such as the Joint Venture. All partners now have a single source of information on how to maximize non-game bird benefits on their habitat acquisition and restoration projects. **9/98**
